REVIEWED: Apple's All-New iPods

Macworld

www.macworld.com

November 2010

APPS!

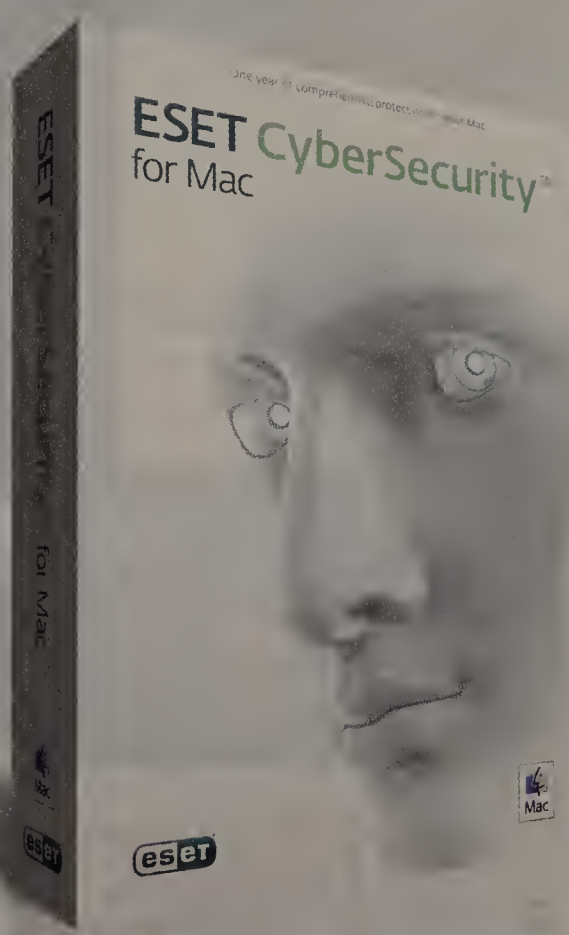
117 Top Downloads for Your iPhone, iPad & iPod Touch

PREVIEW: Microsoft Office 2011

Safe made safer

ESET CyberSecurity™ adds an extra layer of protection to Apple's built-in Internet security features, keeping you protected in cyberspace and moving at the speed of light.

With low memory usage and minimal alerts, it will not interfere with your Mac's performance while you work, explore or play online.



Install confidence.™

eset®

www.eset.com/mac

THE SHACK®
PRESSES PLAY
ON THE NEW iPod® FAMILY.

TRADE WHAT YOU HAVE FOR WHAT YOU WANT.†

Get as much as $60* when you trade in your 8GB iPod touch® 3rd generation.

VISIT RADIOSHACK OR
RadioShack.com/TradeAndSave
TO LEARN MORE

THE SHACK TRADE&SAVE PROGRAM

iPod
Authorized Reseller

RadioShack®

iPod players available in select stores and quantities may be limited. Not available online. iPod and iPod touch are registered trademarks of Apple Inc.
*Value will be given on a RadioShack Gift Card. Offer good 10/3-11/6; value may vary beyond that date. To be eligible for this offer, the iPod must "power on", cannot be PIN locked and must be in fully functional, working condition without any broken components, including, but not limited to, cracked or broken display. In addition, the housing or casing cannot be cracked or broken, and neither the display nor the housing can exhibit any signs of liquid damage. Trade-in program not available where prohibited by local law. †Trade in value may not equal price of new product.

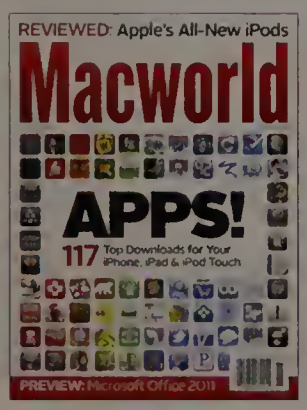
Incorporating MacUser

Macworld

CONTENTS

November 2010

26 Appstravaganza!



On the Cover
Design by Rob Schultz

COVER STORY

26 Appstravaganza!
We've combed through thousands of our iOS app reviews to put together collections of apps aimed at helping you get things done, stoking your creativity, keeping you entertained, and doing much more.

FEATURE

46 First Look: Microsoft Office 2011
The release of the latest version of Microsoft's venerable office suite is on the horizon. Here's a peek at what you can expect.

OPINION

7 From the Editor's Desk
Apple loosens its grip on the App Store and provides developers with clearer guidelines.

MAC USER

10 The Cube at 10: Anatomy of a Flop
With its high price and lack of expandability, the Power Mac G4 Cube was bound to fail. But the idea of the Cube lives on.

11 Another Nail in Flash Video's Coffin

12 OS X Graphics Update: Not So Minor

13 Will Gmail Replace Your Phone?

14 REVIEW New Mac Pros: Not So Fast, iMac

18 Mac Gems
Make managing contacts even easier, set simple reminders easily, put your menu bar everywhere, cut and paste your files, and more.

iOS CENTRAL

22 The Pros and Cons of Jailbreaking
The government says it's legal to jailbreak your smartphone. But should you?

23 Apple Releases One iOS Update, Preps Another

24 Coming Attractions: HBO, Verizon iPad Streaming Apps

CONTENTS November 2010

WORKING MAC

58 The iPad Goes to Work
Small companies and entrepreneurs are finding innovative ways to use Apple's tablet.

60 Five Ways to Customize Chrome

62 REVIEW The Mac Mini with Snow Leopard Server

PLUS: Reviews 64, Business Center 66

PLAYLIST

68 iPod Bonanza
REVIEW Apple has an all-new iPod lineup, and we have reviews of all the models.

72 REVIEW iTunes 10 Goes Social

74 Apple TV Makeover

PLUS: Reviews 76

DIGITAL PHOTO

78 Secrets of an iPhoto Editing Pro
Here are six tips that will make editing images in iPhoto easier.

79 REVIEW Pixelmator Ups Its Game

80 The Art of Cropping

82 Do Camera Phones Beat Point-and-Shoots?

PLUS: Reviews 84

CREATE

86 iTunes Art School
We show you how to create your own album artwork for iTunes.

87 Offbeat Pages Designs

88 Reprising History

PLUS: Reviews 90

HELP DESK

92 Mac OS X Hints
Make simple work of symbolic links, autocomplete folder names, and more.

96 Mac 911
Split a GarageBand project into multiple tracks, use a UPS with Snow Leopard, move a Mac mini's AirPort card, and more.

BACK PAGE

108 Spotlight
Andy Ihnatko again contemplates the Finder and asks why it can't be more like iTunes.

MULTIMEDIA AT MACWORLD.COM

Check out our latest podcasts, slideshows, and videos

Podcast: Apple's New iPods, Apple TV, and More

Macworld editors discuss the September Apple Music Event, offering first impressions of the new iPods and redesigned Apple TV (macworld.com/6556).

We also recommend:

Slideshow: A Closer Look at Apple's New Products (macworld.com/6557).

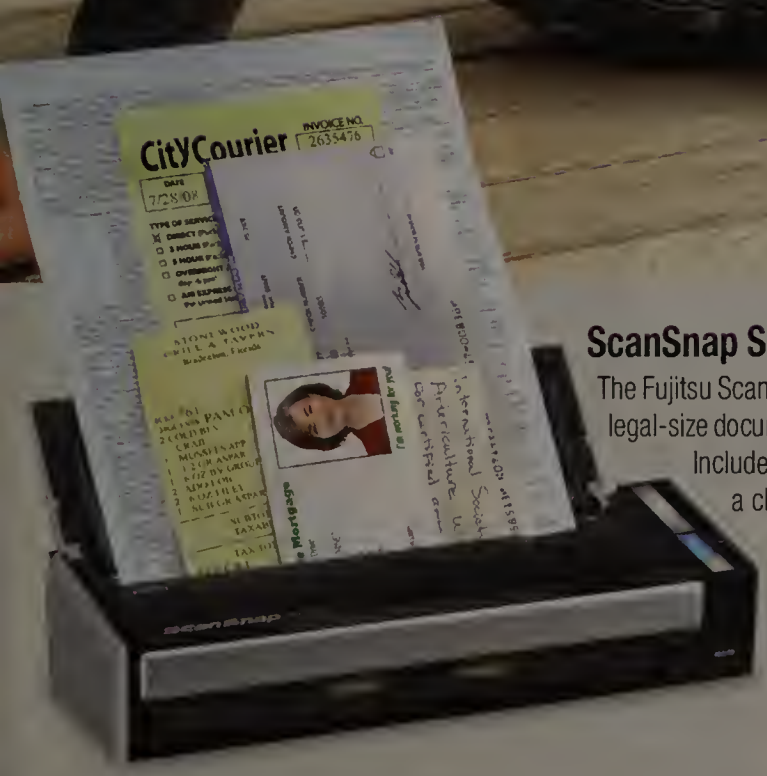
Podcast: Reviewing Apple's iPods (macworld.com/6558).

Slideshow: Most Anticipated Cameras of Fall 2010 (macworld.com/6559).

Podcast: Music Events, Media Converters, and GarageBand (macworld.com/6560).

ScanSnap

Without a ScanSnap scanner, I'd be buried in paperwork right now.



ScanSnap S1300. Our latest high performance mobile scanner is smarter than ever.

The Fujitsu ScanSnap S1300 works with a Mac or PC and lets you scan both sides of everything from business cards to legal-size documents in one pass – directly to business applications or to secure, searchable PDFs for filing or emailing. Included in a footprint nearly half the size of a sheet of paper, a 10-page automatic document feeder (ADF) and a choice of an AC adapter or portable USB power frees you up to be more productive anywhere you want.

Tell us how you'll ScanSnap. You just might win a Gift Card.
For more details visit http://us.fujitsu.com/macworld

ScanSnap S1300 for Mac or PC

FUJITSU

© 2010 Fujitsu Computer Products of America, Inc. All rights reserved. Fujitsu and the Fujitsu logo are registered trademarks of Fujitsu Ltd. All other trademarks are the property of their respective owners.

GoToMeeting®

A TOOL WE CAN'T LIVE WITHOUT

Costello & Sons, Insurance Brokerage
Real GoToMeeting Customer

Hold unlimited
online meetings
for only $49/month

FREE 30-DAY TRIAL
promo code: mac
www.gotomeeting.com

by CITRIX®

 By Jason Snell

A More Open App Store

Apple allows developers to use new tools, provides clearer guidelines

Ever since the App Store launched, developers have been complaining about the way Apple runs it. First it was the mysterious process in which some apps were approved, others were rejected, and nobody knew why. More recently, there was Apple's ban on apps that were developed with any tools other than Apple's own Xcode.

It's clear that Apple has heard these complaints. At several public events, Steve Jobs has gone out of his way to explain that, while the market for Web-based apps might be completely open, the App Store is carefully curated—and Apple intends to keep it that way.

Those explanations haven't quieted the criticism. But Apple's recent modification of its policies for app developers (macworld.com/6573)—allowing for apps created with third-party development tools and clarifying the app-approval process—could.

Some apps were approved, others were rejected, and nobody really knew why.

Development Tools

In April, Apple banned any app that wasn't originally written in the C programming language. At that time, Adobe was getting ready to release Flash Packager for iPhone, which would enable Flash developers to convert their Flash code into native iPhone code. But Apple's announcement meant that no app created with Flash Packager would ever be approved for sale in the App Store. At the same time, Apple released the iPad, which (like other iOS devices) didn't support Adobe's Flash in its Web browser.

Some members of the media conflated those two events. So when Apple later loosened its policies to allow development tools other than Xcode, we saw some headlines to the effect that Apple was backtracking on its Flash ban. But Flash still doesn't run on iOS. All that's changed is that Flash developers can now use Adobe's Flash Packager to create native iPhone apps.

PHOTOGRAPH BY PETER BELANGER

Apple's change in policy isn't about Flash alone. I think it's really about making life easier for game developers (who may use scripting languages like Lua [www.lua.org]) and those who use easier-to-use development tools like revMobile (www.runrev.com) and Real Studio (www.realsoftware.com).

App Review Guidelines

At the same time that Apple loosened its rules about development tools, it also clarified the reasons why some apps are approved and others are rejected. The new guidelines (available only to registered developers) are a marvelous first step, giving those programmers some clear don'ts as well as a few dos.

The new guidelines are written in a personal, casual tone. (They read like they were either dictated by Steve Jobs or crafted by a very good ghostwriter.) They include such gems as, "If you want to criticize a religion, write a book," and "We don't need any more Fart apps." More broadly, it explains why Apple wants to keep the App Store a closed shop. You may agree or disagree with that explanation, but the underlying philosophy is clearer.

If you're a developer, such clarity is vital. Why invest money and time in building an app if you're afraid it will never be approved? The more you know about why apps are—and aren't—approved for sale, the more likely you are to make those investments.

That said, Apple has also made it quite clear that the rules may change. "This is a living document," the guidelines say, "and new apps presenting new questions may result in new rules at any time." With any luck, Apple will keep this living document up to date, so that developers can at least find out about changes in a timely fashion.

Apple has also created a review board, to act as an appeals court for rejected apps. Many developers have complained that they've had no recourse when an app has been rejected; they've wanted to make a case for their apps, but have had no place to go. Ideally, this new review board will provide that venue.

In introducing the review board in its new guidelines, Apple declared, "If you run to the press and trash us, it never helps." That's not entirely true. In several cases, press coverage of a ridiculous rejection was followed by a reversal of that decision. But now that there's an official appeals process, developers should have a chance to air their grievances in private before doing so in public.

It's unlikely that these steps will quiet all App Store critics. But the most important critics—iOS app developers themselves—should find Apple's policy changes very good news indeed.

Jason Snell is the editorial director of *Macworld*. E-mail him at jason_snell@macworld.com or follow him on Twitter at twitter.com/jsnell.

MacMania 11

InSightCruises.com/Mac-11

Welcome to MacMania 11, visiting Patagonia (South America) February 4 -16, 2011. We sail Buenos Aires, Argentina to Santiago, Chile with visits to the Falkland Islands, Ushuaia, Tierra del Fuego, Antarctica if you wish, and the Chilean fjords. Before we sail you may visit Iguazu Falls and after our cruise consider taking a 3-day trip to Machu Picchu.

For a full listing of seminars visit
InSightCruises.com/Mac11-seminars

Speakers include:

- Dan Lyons (aka Fake Steve)
- Leo Laporte • Sal Soghoian
- Don McAllister

IGUAZU FALLS & MACHU PICCHU

Partake in our private ANTARCTICA excursion!
Call for availability and details.

Insight Cruises
THE JOURNEY WITHIN

CO-PRODUCED BY: Macworld

CS1# 2065380-40

Macworld

VP, EDITORIAL DIRECTOR Jason Snell

EXECUTIVE EDITORS Philip Michaels, Dan Miller

MANAGING EDITOR Sue Voelkel

ART DIRECTOR Rob Schultz

SENIOR WEB PRODUCER Curt Poff

SENIOR EDITORS Christopher Breen, Jackie Dove, Dan Frakes, Roman Loyola, Scholle Sawyer McFarland, Jonathan Seff

ASSISTANT MANAGING EDITOR Sally Zahner

SENIOR ASSOCIATE EDITORS Heather Kelly, Dan Moren

ASSOCIATE EDITORS David Chartier, Chris Holt

DESIGNER Kate VandenBerghe

EDITORIAL INTERNS Sam Felsing, Stephanie Kent, McKinley Noble

SENIOR CONTRIBUTORS Adam C. Engst, Rob Griffiths, John Gruber, Jim Heid, Andy Ihnatko, Joe Kissell, Ted Landau, Rick LePage, Ben Long, Kirk McElhearn, John Moltz, John Siracusa, Derrick Story

DIRECTOR, MACWORLD LAB James Galbraith

LAB MANAGER Tony K. Leung

BENCHMARK DEVELOPMENT MANAGER James Motch

DEVELOPMENT ANALYSTS Thomas Luong, William Wang

EDITORIAL ASSISTANT Alex Wawro

LAB INTERN Armando Rodriguez

CONTRIBUTING PHOTOGRAPHER Peter Belanger

HOW TO CONTACT MACWORLD SUBSCRIPTION SERVICES

Access your subscription account online—24 hours a day, 7 days a week—at www.macworld.com/customer_service or http://service.macworld.com. You can use online subscription services to view your account status, change your address, pay your bill, renew your subscription, report a missing or damaged issue, get the answers to frequently asked questions, and much more.

To start subscribing, visit http //subscribe.macworld.com.

U.S. MAIL	Macworld Subscriptions Department P.O. Box 37781, Boone, IA 50037-0781 (If you are writing about an existing account, please include your name and address as they appear on your mailing label.)
E-MAIL	subhelp@macworld.com (Send your full name and the address at which you subscribe; do not send attachments.)
FAX	515/432-6994
PHONE	800/288-6848 from the United States and Canada; 515/243-3273 from all other locations

The one-year (12-issue) subscription rate is $34.97; the two-year rate, $59.97; and the three-year rate, $79.97. Foreign orders must be prepaid in U.S. funds; add $10 per year for postage to Canada or $25 per year for air freight to all other countries. Checks must be made payable in U.S. currency to *Macworld*. Please allow 3 to 6 weeks to receive your first issue or for changes to be made to an existing subscription.

SUBSCRIBERS: If the Post Office alerts us that your magazine is undeliverable, we have no further obligation unless we receive a corrected address within one year.

MACWORLD EDITORIAL

The editors of *Macworld* welcome your tips, compliments, or complaints. Some stories and reviews from past issues can be located at www.macworld.com. We are unfortunately unable to look up stories from past issues; recommend products; or diagnose your Mac problems by phone, e-mail, or fax. You can contact Apple toll-free, at 800/538-9696, or visit the company's Website, at www.apple.com. For editorial and advertising contact information, please turn the page.

November 2010, Volume 27, Issue 11

Macworld is a publication of Mac Publishing, L.L.C., and International Data Group, Inc. *Macworld* is an independent journal not affiliated with Apple, Inc.

Copyright © 2010, Mac Publishing, L.L.C. All rights reserved. *Macworld*, the Macworld logo, *Macworld Lab*, the mouse-ratings logo, *MacCentral.com*, *PriceGrabber*, and *Mac Developer Journal* are registered trademarks of International Data Group, Inc., and used under license by Mac Publishing, L.L.C. *Apple*, the Apple logo, *Mac*, and *Macintosh* are registered trademarks of Apple, Inc. Printed in the United States of America.

IDG
INTERNATIONAL DATA GROUP

INTERNATIONAL DATA GROUP CHAIRMAN OF THE BOARD
Patrick J. McGovern

IDG COMMUNICATIONS, INC. CEO
Bob Carrigan

Macworld

PRESIDENT AND CEO
Mike Kisseberth

SENIOR EXECUTIVE ADMINISTRATOR
Caroline Ward

VP, SALES AND MARKETING
Stacey Levy (415/978-3255)

DIRECTOR OF SALES
Gabe Rogol (415/974-7373)

EAST

ACCOUNT DIRECTOR
Amy Singer (201/634-2317)

SALES MANAGER
Kathy Rebello (508/820-0440)

ACCOUNT EXECUTIVE
Paul Moretti (415/243-3575)

SALES ASSOCIATE
Shari Redan (207/899-2099)

SOUTHWEST

ACCOUNT DIRECTOR
Cindy Hamilton (949/442-4005)

SENIOR ACCOUNT EXECUTIVE
Duane Hampson (415/978-3133)

SALES ASSOCIATE
Chrissy Schneider (415/978-3269)

NORTHWEST

ACCOUNT DIRECTORS
Elaine Ebner (415/267-4578)
David White (415/243-3664)

ACCOUNT EXECUTIVE
Carol Johnstone (415/978-3390)

SALES ASSOCIATE
Nelson Hong (415/978-3266)

MARKETING MANAGER
Jim Hopkins

DIRECTOR, AD OPERATIONS
Kevin Barden

AD OPERATIONS SPECIALIST
Keri Campbell

AD OPERATIONS COORDINATOR
Lauren Martinelli

SENIOR DIRECTOR, PROGRAM DEVELOPMENT
Brian Buizer

PROJECT MANAGER, SALES
Leilani Lopez

SALES ASSOCIATES
Nelson Hong, Shari Redan, Chrissy Schneider

CONTENT DIRECTOR, PCWORLD | MACWORLD CONTENT WORKS
Ted Greenwald

DIRECTOR, PRODUCTION
Nancy Jonathans

PREPRESS MANAGER
Tamara Gargus

PRODUCTION SPECIALIST
Jerry Wandel

CTO
Aaron Jones

SENIOR DIRECTOR, IT & WEB OPERATIONS
Sean Greathouse

IT MANAGER
Walter Clegg

SYSTEMS ANALYST
Eileen Quan

IT TECHNICIAN
Dan Dudziak

SENIOR SYSTEM/NETWORKS ADMINISTRATOR
Wil Shultz

SENIOR WEB OPERATIONS ADMINISTRATOR
Andrew Trice

DIRECTOR, SOFTWARE DEVELOPMENT
Jim Hutson

SOFTWARE DEVELOPMENT MANAGER
Kieran Fitzpatrick

SENIOR SOFTWARE DEVELOPERS
Alexis Barrera, Bill Cappel, Justin Counts, Christian McKeegan, Wei Ming Xu

EXECUTIVE VP/GENERAL MANAGER, ONLINE
Stephan Scherzer

VP, BUSINESS DEVELOPMENT
Ulla McGee

SENIOR DIRECTOR, AUDIENCE DEVELOPMENT AND ANALYTICS
Alexa Wriggins

DIRECTOR, PROGRAM MANAGEMENT
David Lake

PRODUCT MANAGER, MOBILE
Jacky Lee

NEWSLETTER SERVICES MANAGER
Michael E. England

E-MAIL MARKETING MANAGER
DW Malouf

RESEARCH MANAGER
Miguel Beteta Rodrigo

RESEARCH ANALYST
Kyle Flick

E-COMMERCE MANAGER
Alisha Billingsley

SOCIAL MEDIA COORDINATOR
Toni Panayotov

DIRECTOR, UX/UI
Jason Brightman

SENIOR VIDEO PRODUCER
Chris Manners

USER INTERFACE DESIGNER
Sky Collins

INTERACTIVE DESIGNER
Eliza Wee

PROCIRC SUBSCRIPTION MANAGEMENT
Shawne Burke Pecar, Megan Guard

PROCIRC RETAIL SOLUTIONS
Scott Hill, Mark Peterson

VP, HUMAN RESOURCES
Kate Coldwell

HUMAN RESOURCES REPRESENTATIVE
Ellen Cobb

SENIOR VP, CFO/COO
Vicki Peilen

DIRECTOR, FINANCE
Diane Ryczek

DIRECTOR, FINANCIAL AD OPERATIONS
Diane Hacker

DIRECTOR, ADVERTISING ACCOUNT SERVICES
Kevin Greene

DIRECTOR, ACCOUNTING
Michelle Reyes

STAFF ACCOUNTANT
Scott Lum-Duenas

ACCOUNTING ASSISTANT
Jose Rodas

HOW TO CONTACT MACWORLD STAFF

Our offices are located at 501 Second Street, 6th Floor, San Francisco, CA 94107; phone, 415/243-0505; fax, 415/243-3545. *Macworld* staff can be reached by e-mail at *firstnome_lastnome@macworld.com*.

LETTERS TO THE EDITOR

Send comments about any aspect of *Macworld* to letters@macworld.com. Due to the high volume of mail we receive, we can't respond to each letter. We reserve the right to edit all submissions. Letters published in *Macworld* or on Macworld.com become the property of Mac Publishing.

BACK ISSUES OF MACWORLD

Starting with the March 2003 *Macworld*, back issues can be downloaded in digital format, from www.zinio.com ($6.99; Mac OS X 10.1 or later required). Print-format back issues (subject to availability) cost $8 per issue for U.S. delivery, and $12 for international delivery; prepayment in U.S. currency to *Macworld* is required. Send a check or money order to *Macworld* Back Issues, P.O. Box 37781, Boone, IA 50037-0781; or phone 800/288-6848 (U.S. and Canada) or 515/243-3273 (all other locations).

REPRINTS AND PERMISSIONS

You must have permission before reproducing any material from *Macworld*. Send e-mail to permissions@macworld.com; please include a phone number.

MAILING LISTS

We periodically make lists of our customers available to mailers of goods and services that may interest you. If you do not wish to receive such mailings, please write to us at *Macworld*, P.O. Box 37781, Boone, IA 50037-0781, or e-mail us at subhelp@macworld.com. Please include a copy of your mailing label or your full name and address.

MACWORLD CONFERENCE & EXPO

As the flagship sponsor of Macworld Conference & Expo, *Macworld* encourages all subscribers to attend this exciting annual industry event. For information, please visit www.macworldexpo.com.

BPA INTERNATIONAL

PRINTED WITH SOY INK

Tidy Up!

The Easy Way to Clean Up Hard Drive Clutter

Use Tidy Up! to find and remove extraneous files that slow your computer down.

With Tidy Up! you can search for duplicate files and packages in numerous ways:

- Owner Application
- Content
- Type
- Creator
- Label
- Date
- Extension
- Time Modified
- Time Created
- Name
- Visibility
- Age

You can also search by the tag, duration and bit installments of MP3 and AAC sound files and EXIF metadata, search the contents of the iPhoto, Aperture, iTunes databases and Mail mailboxes, and synchronize deletions with iPhoto, Mail and iTunes.

Download Tidy Up! now and try it for FREE

www.hyperbolicsoftware.com

Hyperbolic Software

Available at:

Office DEPOT

NAVARRE DISTRIBUTION SERVICES

© 2010 Hyperbolic Software. All rights reserved.
Hyperbolic Software and Tidy Up! are trademarks of Hyperbolic Software.
All the other product names mentioned in this herein are the trademarks of their respective companies.

The Cube at 10: Anatomy of a Flop

High price, lack of expandability contributed to G4 Cube's demise a decade ago

BY BENJ EDWARDS

When it comes to love-it-or-hate-it products from Apple, few can match the Power Mac G4 Cube. Even a decade after its debut (Steve Jobs unveiled the Cube at the July 2000 Macworld Expo in New York, and it shipped a month later), the Cube still stirs passionate debate between its detractors and defenders.

To some, the machine put form over function and style over power. Fans of the Cube were equally as adamant that the machine was brilliant and its design beautiful. Even today, many Mac users consider the Cube to be a cult classic that was simply ahead of its time.

The G4 Cube was a flop at the cash register. In January 2001, Apple said that it had sold only one-third as many Cubes as it had expected. It sold 29,000 Cubes between October and December 2000, compared to 308,000 total Mac sales during that same quarter. And in the very next quarter, Cube sales fell to 12,000 units. Apple ceased production of the Cube in July 2001, one year after its introduction.

Why didn't people buy the G4 Cube? With 10 years' worth of perspective at our disposal, I can think of four key reasons the Cube never took off.

Eye of the Beholder

How do you sell a computer that doesn't look like a computer? Who do you target? That was the biggest problem Apple faced when launching the Cube—a computer so far out there in a land of generic beige boxes that it might as well have been an alien monolith perched on a crystal throne.

People looked at the Cube and saw different things: an underpowered, over-expensive toy; or, in contrast with the anthropomorphized everyman's iMac, an emotionally inaccessible, ultrageometric gray box suspended in an impenetrable glasslike prison.

Others appreciated the Cube as a truly unique computer. But those people were few and far between. The Cube's odd design limited its potential market from the outset.

The Cube Lives! The Power Mac G4 Cube's design was ahead of its time. But many of the design philosophies Apple employed with the Cube can be found in the company's original Mac mini, which was released in 2005.

PHOTOGRAPH COURTESY OF APPLE

Opinion: Stop Dissing the Cube

Revolutionary desktop set the stage for the Mac mini

From a commercial standpoint, the Power Mac G4 Cube flopped. But five years after the Cube's release, Apple unveiled the Mac mini. That successful desktop Mac carried on some of the design philosophies of the Cube.

The Mac mini inherited the Cube's small size, its general lack of expandability, and its quietness. However, the Mac mini differed from its predecessor where it counted most: price. The introductory, low-end Mac mini cost a mere $499 upon its launch in 2005.

Another factor in the Mac mini's success was its physical appearance. It was smaller than the Cube and less visually challenging, which helped the mini's appeal.

The Cube suffered from an unfortunate case of cord clutter that marred its otherwise beautiful, otherworldly appearance. The Mac mini avoided that by using Bluetooth for wireless peripherals and wireless networking support (Bluetooth was nearly ubiquitous in 2005, unlike in 2000).

Looking back today, it seems that the Cube was simply ahead of its time. It was an ingenious and unique creation that missed the mark by about five years—and $1000. The Cube's enduring appeal among its Mac fans is a testament to that visionary design—one that has yet to be duplicated.

The High Price of Beauty

Even if you wanted to get your hands on a Cube, the lowest-priced model cost $1799 in July 2000 (equal to about $2279 today when adjusted for inflation). That model shipped with a 450MHz G4 processor, 64MB of RAM, a 20GB hard drive, a DVD-ROM drive, and an internal 56-kbps modem. Meanwhile, a Power Mac G4 tower with almost identical specs except for a 400MHz processor cost $200 less. Customers would have to pay a premium simply for the Cube's unique design.

Apple intended the G4 Cube for a midrange market—one step up from the iMac and one step below the most advanced model in the Power Mac G4 line. But only a few months after launch, industry analysts revealed that high-end Mac users were usually the ones springing for the Cube. If people wanted a low-cost G4, the practical customers among them without money to burn could simply buy the less-expensive G4 tower and configure it however they wanted, without limitations.

And during the Cube's time, Apple couldn't even try to woo switchers. Back then, typical Windows PCs were capable of 1GHz CPU clock speeds and sold for far less. Apple had a hard enough time convincing Windows users that its lower-speed G4 processors could perform just as well; persuading them to pay a premium for such a system was a losing proposition.

Complaints about Cracks

Shortly after the Cube's launch, reports of cosmetic flaws in the Cube's transparent polycarbonate shell began to appear on the Internet. Some people brought home their shiny new Macs only to find what they called "cracks" on the corners and the top of the Cube's case.

After a spate of press reports, the situation swelled into a PR nightmare for Apple, which found itself trying to sell a computer whose appeal hinged largely on aesthetics that was now being portrayed as aesthetically flawed. Apple's official response at the time was that the apparent hairline cracks were just "mold lines"—normal artifacts of the manufacturing process. But customers balked.

We'll never know how many customers might have been spooked by the negative publicity. But it probably didn't add to the appeal of a $1799 Mac. And the controversy certainly served as a latch point for critics eager to highlight reasons why Apple's unusual computer was a frivolous waste of money.

Limited Upgrade Potential

Sure, opening a Cube was easy: Flip it open, pop out a handle in the bottom, and pull the core of the machine out of the case. From there, one could easily access the three RAM slots and add an AirPort card. However, there was only so much one could do to upgrade the system beyond that.

While designing a compact computer, Apple naturally had to sacrifice some upgradability to squeeze everything into an 8-by-8-by-8-inch cube. Gone were the PCI slots of the Power Mac G4 tower lineup that helped those machines handle everything from professional audio production to movie editing via plug-in hardware. Furthermore, the Cube's video card (nestled in a single AGP slot) had to be shrunk down to fit into tight quarters. Few upgrade-worthy video cards fit into the Cube's small chassis.

The Cube's interior offered room for only one hard drive, so any extra storage you needed would have to be external. And the external-drive market wasn't anything like it is today—user options for USB and FireWire drives were limited in 2000.

Ironically, the challenge of upgrading Apple's strange machine is what drives the Cube's fans today. For years, they've been squeezing in impressive CPU upgrades, adding fans, and even slipping the Cube's inner chassis into larger cuboid cases to accommodate better graphics cards. That's the spirit of a die-hard Cube fan for you. After all, those few people who actually did buy Cubes during that one-year period still love them to death.

Benj Edwards is a freelance writer who specializes in computer and video game history. He is also the editor in chief of Vintage Computing and Gaming, a blog devoted to vintage technology.

Another Nail in Flash Video's Coffin

H.264 license policy paves way for further adoption

BY LEX FRIEDMAN

MPEG LA, the firm that controls licensing the H.264 video standard that Apple favors, announced that it will never charge any royalties for Internet video encoded using H.264, as long as the video is free to end-users.

Much of the video on the Web is presented via Adobe's Flash technology, which requires use of Adobe's Flash plug-in. Many Websites have made the move to support the new HTML5 standard that makes it possible for Websites to embed video that your computer can play without requiring a third-party plug-in like Flash. Problem is, the big browser developers can't agree on which video format the new tag in HTML5 should use: Some, like Apple (maker of the Safari browser), sided with H.264; others, with a format called Ogg Theora.

The MPEG LA group had declared that it wouldn't charge any royalty fees until 2016, but Mozilla and Opera were worried about what those future costs might be. Should H.264 video become a de facto Web standard in the meantime, the MPEG LA group would be in a position to charge browser developers a healthy fee to keep using the format.

There's plenty of reason to rejoice at MPEG LA's new policy, not least because oodles of HTML5 Web video is already using H.264. If the new licensing means that the Web will soon get even more H.264 HTML5 video, that's more video you can watch with your iPhone, iPod touch, iPad, and a Mac browser without the need for the Flash plug-in.

OS X Graphics Update: Not So Minor

Enhancement results in higher frame rate with popular games

BY DAVID CHARTIER

On the surface, the Snow Leopard Graphics Update 1.0 released in August seems like a minor operating system update. But it can provide a significant performance boost in many graphically demanding games.

Macs released in 2009 and 2010 can now see frame rates that are up to three times higher in games. Tests from Bare Feats (barefeats.com) on a 2.93GHz eight-core Mac Pro with ATI Radeon HD 4870 graphics saw frame-rate boosts of 10 to 37 percent in games like World of Warcraft, Call of Duty 4, and Doom 3.

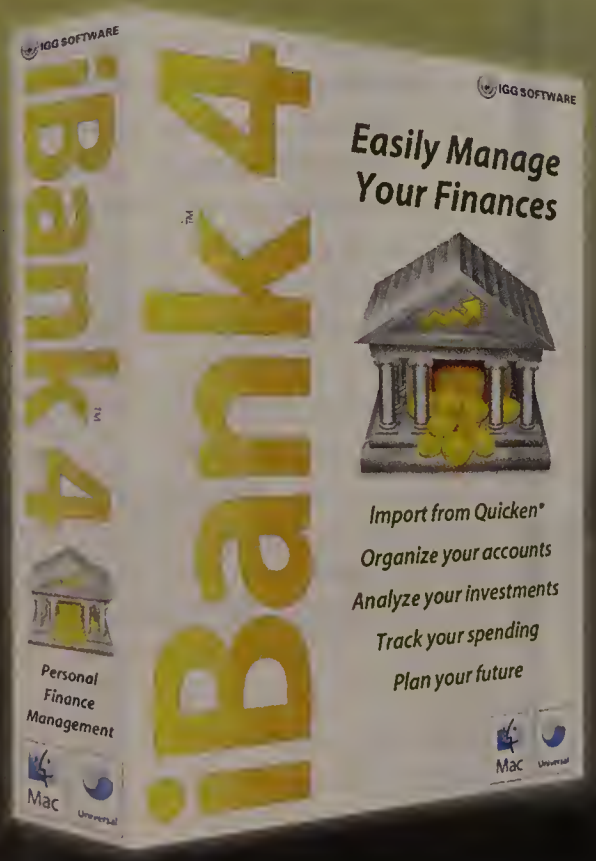
The new graphics drivers in the update enabled previously unimplemented optimizations. Game company Valve came to ATI with its games and a pre-production Mac version of its Steam gaming service, and ATI spent time ensuring that the game's engines and graphics would look right on a Mac.

Despite the good news for Mac gaming performance and Steam's arrival earlier this year, it's still too early to tell when, or if, gaming will explode on the Mac. But Valve is just the kind of influential game company to spearhead such a push. Its announcement that it would share Mac OS X graphics code with third-party Steam game developers turned some important heads. One week after Steam's debut, Mac games already made up 11 percent of Steam purchases, and some of Valve's recent popular series hadn't even been released then. Finally, Portal 2, the sequel to the surprise break-out shooter/puzzler

hybrid, will mark the first time Valve has simultaneously released a title for Mac and Windows computers when it debuts in February 2011. That's territory into which only a few major game companies—Blizzard, for example—have previously ventured.

IGG SOFTWARE

The Gold Standard for Mac Money Management



Faster and more intuitive, the **all-new iBank 4** offers powerful reports, envelope budgeting and superior investment tracking, plus **all the essentials** you expect from a full-featured finance manager: check printing, direct downloads, robust data import and export, iPhone sync, password protection and lots more.

Free **30-day unlimited** trial download. ***www.go-iBank.com***

iBank 4™

J&R Fry's ELECTRONICS MICRO CENTER TEKSERVE amazon.com and you're done. Apple Stores

Will Gmail Replace Your Phone?

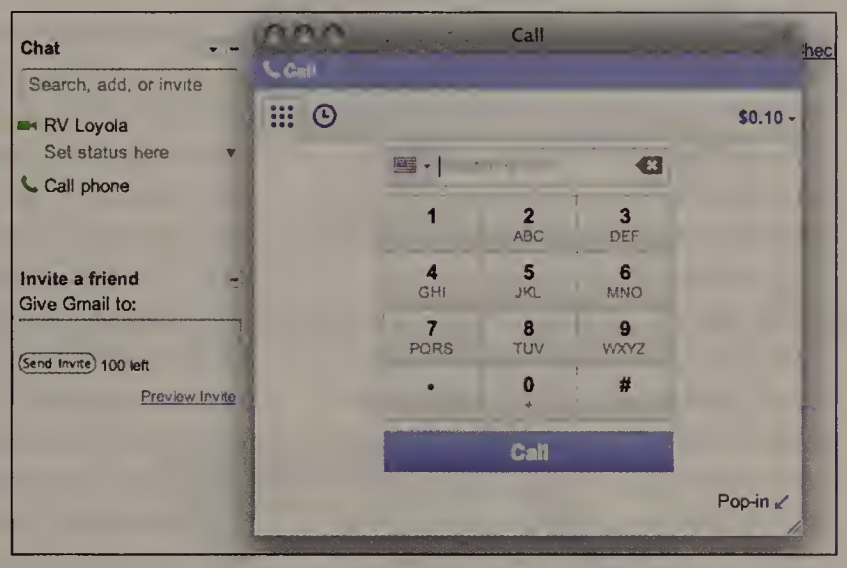
Get free phone calls until the end of 2010

BY SERENITY CALDWELL

Gmail users can now make local or international phone calls from right inside their Gmail account, thanks to integration with the Google Voice service. According to Google, callers in the United States and Canada can make calls to and from the two countries for free until the end of 2010; Google Voice calling rates will dictate the cost of ringing up international phone numbers.

The feature requires that you install Google's voice and video plug-in on your Mac; you can download it from google.com/chat/video. You can then select Call Phone from the Chat menu in Gmail's sidebar and use the virtual keyboard to dial any phone number; alternatively, you can enter the name of one of your contacts. Those with a Google Voice account can receive incoming calls to their number within Gmail, if they so choose. You can also disable the phone feature in Gmail.

Unfortunately for Google Apps users and people living outside the United States and Canada, Gmail calling is currently being rolled out only to users with personal Gmail accounts in those two countries. However, according to Google, the company is working to make Gmail calls available to a wider audience.



Internet Phone The ability to make calls through Gmail leaves the traditional landline phone one step closer to obsolescence.

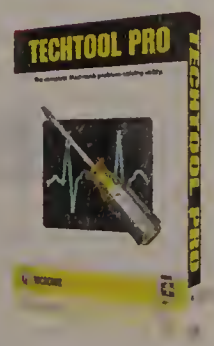
TECHTOOL PRO 5

Problems?

Fix them yourself and save money on costly repair bills.

Save Money! Install TechTool Pro Now!

- Keep your computer running smoothly.
- Help prevent problems in the future.
- Fix most of your problems on the spot.



Mac Universal

Micromat, Inc., 5329 Skylane Blvd., Santa Rosa, CA 95403, USA
800-829-6227 707-566-3831 info@micromat.com www.micromat.com

AcademicSuperstore.com campustech.com frys.com drbott.com bestbuy.com navarre.com macmall.com store.apple.com microcenterorder.com

©2009 Micromat, Inc. All rights reserved. TechTool is a registered trademark of Micromat, Inc.

New Mac Pros: Not So Fast, iMac

Apple updates its most user-accessible Mac

BY JAMES GALBRAITH

REVIEW These days the consumer-minded iMacs stand on their own against (and sometimes surpass) the Mac Pro in day-to-day performance. Does that mean that the Mac Pro has lost its relevance in today's work environment? Hardly.

The Mac Pro continues to be all about expandability and customization. There are literally billions of configuration combinations available, incorporating anywhere from four to 12 processing cores, one to four hard drives or SSDs, up to 32GB of RAM, an Apple RAID card, multiple graphics cards, and more. Another advantage the Mac Pro has is its use of multiple processors with multiple cores. Though programs that take full advantage of up to 24 virtual processing cores are scarce, for the people using Mathematica, Cinema 4D, and other high-end software, the performance advantage is undeniable.

Apple released three new Mac Pro models in August. The $2499 model has a 2.8GHz quad-core Intel Xeon (Nehalem) processor with 3GB of RAM, a 1TB hard drive, and a 1GB ATI Radeon HD 5770 graphics card. The $3499 model has two 2.4GHz quad-core Intel Xeon (Westmere) processors—eight cores total—with the same hard drive and graphics, but 6GB of RAM. Both systems include an 8X DVD-burning SuperDrive with dual-layer burning support. Apple also sells a 12-core Mac Pro model ($4999) that *Macworld* will review in a future issue.

Externally and internally, the Mac Pro's case design hasn't changed from that of the previous model. The Mac Pro's front has two FireWire 800 ports, two USB 2.0 ports, and a headphone jack. On the back you'll find two additional FireWire 800 ports, three USB 2.0 ports, two gigabit ethernet ports, optical audio-in and -out ports, and analog audio-in and -out ports.

The $2499 Mac Pro's Nehalem processor is the same processor that debuted in the last generation of Mac Pros, but it runs at a higher clock speed. The $3499 Mac Pro marks the debut of Intel's Westmere Xeon processors in the Mac. Based on a 32nm process, as opposed to Nehalem's 45nm process, the new Westmere offers up to six cores per processor, while providing a 50 percent larger Level 3 (L3) cache (12MB shared per processor instead of 8MB) than the Nehalem processors.

The ATI Radeon HD 5770 graphics card replaces the nVidia GeForce GT 120 from the previous generation. Apple says that the Radeon HD 5770 is up to five times faster than the GeForce GT 120.

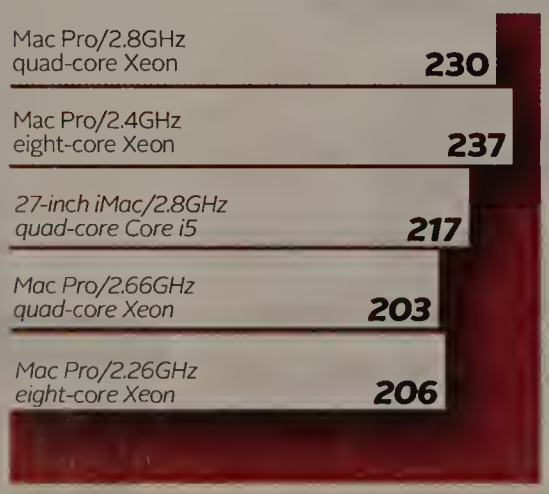
Compared to the previous $2499 Mac Pro with its single quad-core 2.66GHz Intel Xeon Nehalem processor, 3GB of RAM, 640GB hard drive, and 512MB nVidia GeForce GT 120 graphics card, the new 2.8GHz quad-core Mac Pro is 13 percent faster overall in our Speedmark 6 benchmark suite of tests. In most tests the new Mac Pro was just a few seconds faster, though it saw a big gain in graphics performance, with the Radeon HD 5770 card able to display 87.7 frames per second in our Call of Duty test, while the GeForce GT 120 in the older system managed to display just 49.3 frames per second. iPhoto importing was 18 percent faster and iMovie exporting was nearly 30 percent faster on the new 2.8GHz quad-core Mac Pro.

Overall, the new 2.4GHz eight-core model is only 3 percent faster than the new 2.8GHz quad-core Mac Pro. When we look at individual test results, however, we see that the eight-core system is much faster with the programs that take full advantage of multiple cores. MathematicaMark, for example, scored nearly 44 percent higher on the eight-core system than on the new quad-core system. Cinebench was 28

PHOTOGRAPH COURTESY OF APPLE

Macworld Lab Test

Speedmark 6 Test Results



Longer bars are better. Reference systems are in *italics*. Speedmark 6 scores are relative to those of a 2.13GHz Core 2 Duo MacBook, which is assigned a score of 100. All new Mac Pros and the iMac were running Mac OS X 10.6.4. Reference Mac Pros were running Mac OS X 10.6.1. For complete benchmark test results for the Mac Pros, visit macworld.com/6564.—MACWORLD LAB TESTING BY JAMES GALBRAITH AND MCKINLEY NOBLE

Supports Apple iPad Case

For Movies

World's First iPad Stand with Built-in 16 Hour Battery Pack

For Typing

For Reading

HyperMac Stand™

18° / 45° Soft touch slots hold iPad at 18° or 45° with or without iPad case

Built-in high capacity 40Wh battery to keep your iPad charged

Position your iPad either vertically or horizontally

16 Hours Up to 16 additional hours of battery life for the iPad

Check out our other batteries for the MacBook, iPhone, iPod and iPad

HyperMac Nano
1800mAh
Recharge iPhone **1.5x**
Sleek aluminum casing
Available 10 colors

HyperMac Micro
3600mAh
Recharge iPhone **3x** or
Extend iPad's battery
life up to **15** hrs

HyperMac Mini
7200mAh
Recharge iPhone **6x** or
Extend iPad's battery
life up to **20** hrs

HyperMac 60Wh
16000mAh
Extend battery life of
MacBook up to **19** hrs
or iPad up to **34** hrs

HyperMac 100Wh
27000mAh
Extend battery life of
MacBook up to **26** hrs
or iPad up to **50** hrs

HyperMac 150Wh
41000mAh
Extend battery life of
MacBook up to **34** hrs
or iPad up to **70** hrs

HyperMac 222Wh
61000mAh
Extend battery life of
MacBook up to **45** hrs
or iPad up to **99** hrs

Car Charger
For MacBook
Charge your MacBook
even while you are
on the road

www.hypermac.com/mw11 | 1.888.202.1888

facebook.com/hypermac

Apple, MacBook, iPod and iPhone are registered trademarks and iPad is a trademark of Apple, Inc. Toy Story 3 is a trademark of Disney/Pixar. Wall Street Journal is a registered trademark of Dow Jones & Company, Inc. All rights reserved.

percent faster on the eight-core system. With many programs, though, having fewer but faster processors was preferable, which gave the 2.8GHz quad-core Mac Pro an edge over the 2.4GHz eight-core Mac Pro in our tests for Aperture, iTunes, and Adobe Photoshop.

Comparing the new 2.4GHz eight-core Mac Pro to its predecessor, a 2.26GHz eight-core model, we see a 15 percent improvement in our Speedmark 6 overall system performance test suite.

Comparing the new 2.8GHz quad-core Mac Pro to the $1999 27-inch iMac with a 2.8GHz quad-core Core i5 processor, the Mac Pro scores almost 6 percent higher overall, with wins in Photoshop (10 percent) as well as Cinebench and MathematicaMark (17 percent for both). Both the iMovie tests and the Finder Unzip tests were also faster on the Mac Pro. The iMac finished the compressor test a little less than 3 percent faster than the quad-core Mac Pro, and it was 11 percent faster in the iTunes encoding tests.

Macworld's Buying Advice

Based on performance, the Mac Pro addresses a smaller market each time a new iMac appears. But there is still a need for a fast and highly configurable Mac. The new Mac Pros may seem little more than speed bumps when compared with their predecessors, but they perform better and offer even more options for customization at the same price.

Mac Pro/2.8GHz Quad-Core Xeon
4½; $2499; Apple, www.apple.com; full review, macworld.com/6458

Mac Pro/2.4GHz Eight-Core Xeon
4½; $3499; Apple, www.apple.com; full review, macworld.com/6459

Macs: Current Lineup

PRODUCT	SPECS	RATING	PRICE	DISPLAY	SPEEDMARK 6 [A]	FIND CODE [B]
DESKTOP						
iMac	Intel Core i3/3.06GHz	4½	$1199	21.5 inches	178	6432
	Intel Core i3/3.2GHz	4½	$1499	21.5 inches	190	6433
	Intel Core i3/3.2GHz	4½	$1699	27 inches	188	6434
	Intel Core i5/2.8GHz quad-core	4½	$1999	27 inches	217	6435
Mac Mini	Intel Core 2 Duo/2.4GHz	4½	$699	not included	117	6304
Mac Pro	Intel Xeon/2.8GHz (quad-core)	4½	$2499	not included	230	6458
	Intel Xeon/2.4GHz (eight-core)	4½	$3499	not included	237	6459
	Intel Xeon/2.66GHz (12-core)	none [C]	$4999	not included	none [C]	6460
PORTABLE						
MacBook	Intel Core 2 Duo/2.4GHz (white)	4½	$999	13 inches	118	6207
MacBook Air	Intel Core 2 Duo/1.86GHz	3½	$1499	13 inches	70	4953
	Intel Core 2 Duo/2.13GHz	3½	$1799	13 inches	72	4954
MacBook Pro	Intel Core 2 Duo/2.4GHz	4½	$1199	13 inches	118	6151
	Intel Core 2 Duo/2.66GHz	3½	$1499	13 inches	126	6152
	Intel Core i5/2.4GHz	4½	$1799	15 inches	146	6153
	Intel Core i5/2.53GHz	4½	$1999	15 inches	150	6154
	Intel Core i7/2.66GHz	4½	$2199	15 inches	161	6155
	Intel Core i5/2.53GHz	4½	$2299	17 inches	154	6208

[A] Speedmark 6 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.6 (Snow Leopard). For more information on Speedmark testing, go to macworld.com/5503. [B] In a browser's address field, typing in a find code after *macworld.com/* takes you to a product's review or overview. [C] System has not yet been tested or rated.

PDFpen: Feature #4 – Correct Text in PDFs

New! Version 5

The affordable PDF toolkit

Make changes to your PDFs. . .painlessly

Things change. Mistakes happen. Sometimes you change your mind. Thanks to ***PDFpen***, your PDF documents can change too.

With just a few clicks, you can correct PDF text — or make it go away, forever! Try ***PDFpen*** today and see just how painless PDF editing can be.

To see all the top 10 features of PDFpen, visit us at: www.smilesoftware.com/macworld

Smile

Macworld EDDY AWARDS 2009 WINNER

Software that's just right

Copyright © 2010 SmileOnMyMac, LLC. SmileOnMyMac, DiscLabel, PDFpen, PageSender and TextExpander are trademarks of SmileOnMyMac, LLC.

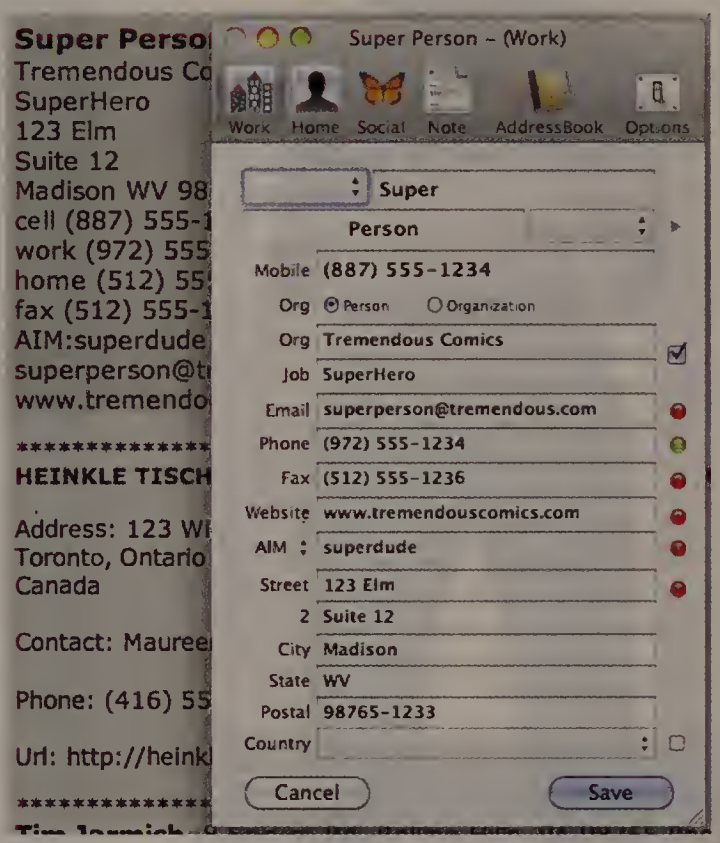
MAC GEMS

Discover Great, Low-Cost Mac Products **By Dan Frakes**

WhoPaste 4.6.3

PRODUCTIVITY Have you ever come across contact information on a Web page, in a document, or in an e-mail message, and wanted to quickly add that information to your contacts? Some Mac OS X programs support Apple's Data Detectors technology, but the feature is limited in both its usefulness and its availability.

A great alternative is WhoPaste. Once you've installed WhoPaste, just select some text on your screen, Control-click (or right-click), and choose the WhoPaste command. (You can use the Services area of the Keyboard pane in System Preferences to assign a keyboard shortcut to WhoPaste.) A contact-editing window immediately appears, with all the information entered, as if by magic, into the correct fields.

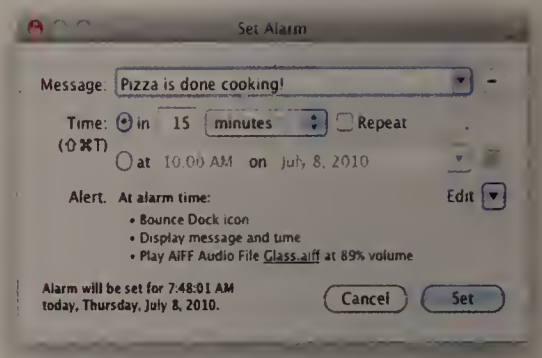


Make Contact Highlight contact information, and WhoPaste can turn it into a contact record.

You can edit any of the data, which is organized across Work, Home, Social, and Note screens. Click Save, and the data is saved to a new contact record in your preferred contacts program—Address Book, Daylite, Entourage, or Google Contacts—or in multiple programs simultaneously. If a contact already exists, WhoPaste instead opens that contact directly to let you edit it.

WhoPaste offers scores of options for customizing its behavior and the way it stores and processes data; provides keyboard shortcuts for quickly creating new contacts or tasks based on the contents of the clipboard; and even includes both AppleScript and Automator compatibility for automating your workflows.

4½; $20; Mac-Chi; macworld.com/6565



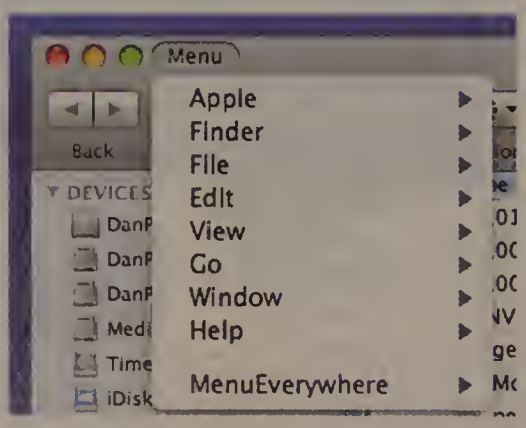
Pester 1.1b10

PRODUCTIVITY Pester is a simple utility for setting simple reminders. You just enter an appropriate alert message, choose when you want to be alerted (at a specific time and date or after a set amount of time has passed), and choose the type(s) of alert (an on-screen or spoken message, a bouncing Dock icon, or any QuickTime-supported media type). Either click Set or press Return, and your alarm is scheduled; Pester's Dock icon shows the time remaining before your next alarm. You can set recurring alarms and reuse recent alarms, and you can access nearly the entire interface by using just the keyboard.

4½; free; Nicholas Riley; macworld.com/6569

Go to Weblog

Read Mac Gems online (macworld.com/macgems) for longer reviews of these and other products.



MenuEverywhere 1.0.9

PRODUCTIVITY If you've got two (or more) displays, it can be a hassle—and an ergonomic hurdle—to access the menu bar when working on any but the primary screen. MenuEverywhere aims to solve this problem in two ways. First, it lets you configure a keyboard shortcut that puts the menu bar—in a compact, hierarchical layout—under your mouse cursor. You can also—or instead—opt for a Menu button that appears in the upper left corner of the active window. Both the Apple menu and the keyboard-shortcut labels also appear in the menu, and you can prevent MenuEverywhere from affecting specific applications and windows.

4½; $7; Binary Bakery Software; macworld.com/6567

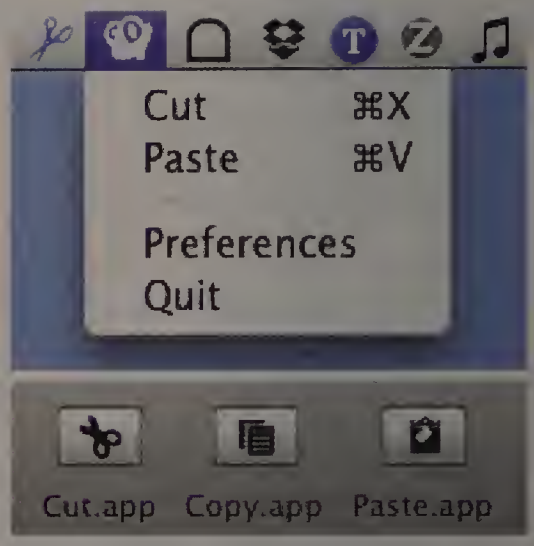
THE NEW EDGE UNDERSTANDS 10,000 VOICE COMMANDS.

Ford

Drive one.

See details next page.

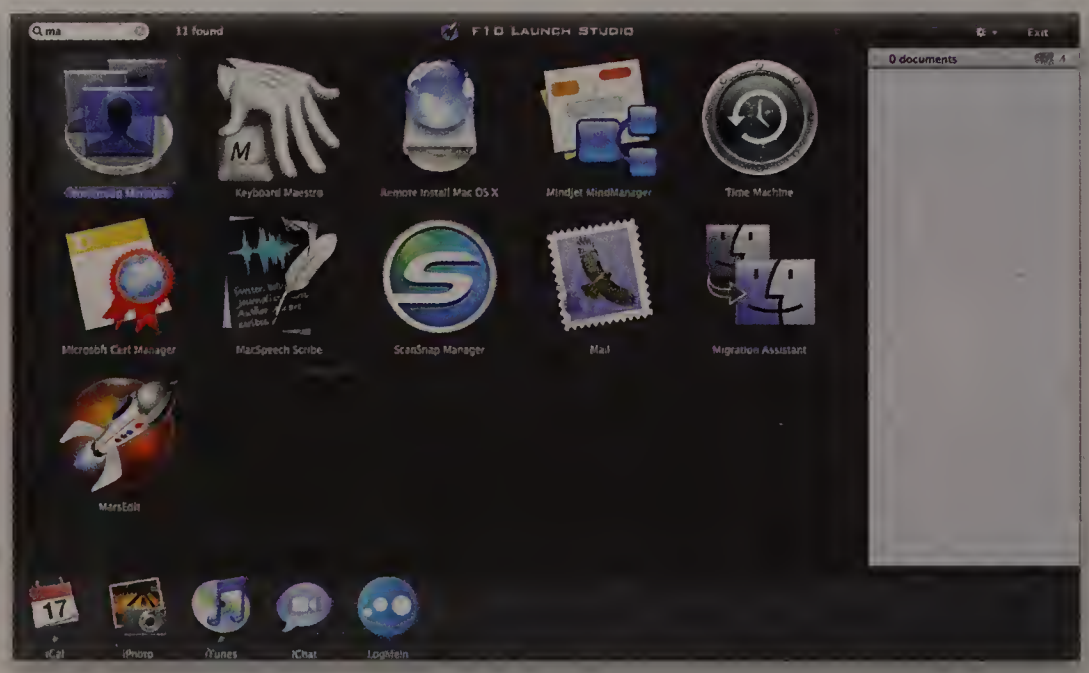
MoveAddict 1.51



UTILITIES A frequent reader request is for a way to cut and paste *files* the way you can cut and paste text and other content. Among the many solutions is MoveAddict, which provides a systemwide menu, Finder-window toolbar buttons, and customizable keyboard shortcuts for cutting and pasting files.

With MoveAddict running, select any file or folder in the Finder and use MoveAddict's Cut command, and then switch to the destination you want to place the item and use the corresponding Paste command—your item is moved to the new location. The program also offers features that make it safer to cut and paste files: MoveAddict doesn't delete an item from its original location until you paste it elsewhere, and a small confirmation message appears on the screen whenever you cut an item (and, later, when you paste it). MoveAddict can also automatically apply a Finder-label color to a file or folder when you cut it to remind you that you need to paste the item somewhere. When you're cutting and pasting a folder, if the destination already contains a folder with the same name, MoveAddict displays a dialog box asking if you want to replace the existing folder, merge the contents of the two folders, or do nothing. If you choose Merge, MoveAddict merges the contents of the moved and existing folders, keeping only a single copy of each file.

●●●●; $5; Kapeli; macworld.com/6568



F10 Launch Studio 3.0

PRODUCTIVITY Another entry in the crowded field of application launchers, F10 Launch Studio has a few unique features that make it worth considering. As with similar utilities, you activate the program's Launch window and then type a few letters of the desired application's name. The Launch window filters its list of programs to display only those that match the letters you've typed. Select a program and press Return to launch it. F10 Launch Studio learns your preferences for particular abbreviations.

But unlike in other launchers, F10 Launch Studio's window contains a dock, similar to the Mac OS X Dock, where you can keep shortcuts to your favorite applications. You can even create multiple docks and use tabs at the bottom of the Launch window to switch between them. The utility also offers a number of customization options. For example, you can create your own keyboard shortcuts for launching particular programs, and F10 can display—and let you choose from—a list of recent documents you've opened in the selected application.—**JEFFREY BATTERSBY**

●●●●; $30; Chronos; macworld.com/6566

WindowClipMBI 1.0.6

UTILITIES WindowClipMBI makes it easy to take screenshots of individual on-screen elements. Click the program's systemwide menu-bar icon, and you get a menu listing all programs and processes that have on-screen items. Move your mouse cursor over a program or process, and a submenu displays a thumbnail for each of that program's elements: windows, drawers, and the like. Choose an element, and a screenshot of that item is saved to the Clipboard for pasting into your favorite graphics or page-layout program. There's also an option to take a timed screenshot—for example, to capture menus in other programs—without having to use OS X's Grab utility.

●●●½; payment requested; Limit Point Software; macworld.com/6570

ENOUGH SAID.

It doesn't just give directions, it takes orders. A whole lot of them. The new **EDGE** with **MYFORD TOUCH.**™* An automotive first. It's quite possibly the world's smartest crossover.

2011 **EDGE**
fordvehicles.com

Simply open your phone's browser and download the free app at gettag.mobi or text "MYFORDTOUCH" to 4FORD. Then follow the directions to snap this tag and see MyFord Touch come to life.**

*Optional. Driving while distracted can result in loss of vehicle control. Only use mobile phones/MyFord Touch/other devices, even with voice commands, when it is safe to do so. Some features may be locked out while the vehicle is in gear. Certain commands abbreviated. See owner's guide for complete commands. **Standard text messaging and data rates apply.

Ford

Drive one.

The Pros and Cons of Jailbreaking

The government says it's legal to jailbreak your smartphone. But is doing so always the smart move?

BY CHRISTOPHER BREEN

The folks who circumvent digital protections on their smartphones to install unapproved applications—a process known as *jailbreaking*—got some good news over the summer. The U.S. Librarian of Congress ruled that the process doesn't violate any copyright laws. In other words, no matter how much Apple may disapprove, you're welcome to jailbreak your phone to install third-party apps not offered by the Apple Store. You're just as free to then unlock your phone for use with another carrier.

But just because you can do something, should you? Consider these pros and cons to jailbreaking your iPhone.

The Bright Side

Here are a trio of reasons to give jailbreaking a try.

Overseas Use When you use your iPhone in another country, you are subject to data-roaming charges. Use your iPhone as you do in the United States, and you're in for a nasty surprise when your next AT&T statement arrives.

Apple may disapprove, but you can legally jailbreak an iPhone to install third-party apps.

Sure, you could sign up for one of AT&T's international plans, which start at $25 a month for 20MB of usage. But jailbreaking and then unlocking your iPhone lets you purchase an inexpensive pay-as-you-go SIM card in the country you're visiting.

Access to Forbidden Apps and Services As extensive as the App Store selection may be, there are still some types of apps that have yet to win Apple's A-OK. For example, video output on the iPhone is limited, by default, to select apps. But by jailbreaking, you can turn to a third-party offering, which you can find via the Cydia software installer app for jailbroken phones. (You install Cydia when you jailbreak your iOS device; it provides access to third-party applications not submitted to or approved by Apple). Or maybe you want to use your iPhone as a modem for your attached computer. AT&T charges you $20 for the privilege and offers no extra data limits. Cydia offers a handful of apps that provide tethering for no additional charge.

Jailbreaking also lets you customize the iPhone's interface in ways Apple doesn't allow. You can, for example, apply themes that change the iPhone's wallpaper and its icons. You can also enable video recording on older phones, like the iPhone 3G, that don't natively support it.

New Life for Old Phones When you upgrade from an old iPhone to a new one, the old iPhone becomes, in essence, an iPod touch. If you jailbreak and then unlock the phone, you have the option of using a different carrier (T-Mobile, in the United States) and purchasing a pay-as-you-go SIM card for it.

The Dark Side

Jailbreaking isn't without its risks. Here are some reasons to be cautious.

Who Do You Trust? When you jailbreak an iOS device by using a tool such as the JailbreakMe.com site or one of the tools offered by the iPhone Dev Team (blog.iphone-dev.org), you don't really know what's happening to your device. I've jailbroken iPhones and iPod touches for years, and I've yet to experience a problem with my data being exploited. But, as they say in the questionable-investment business, past performance is no guarantee of future results.

Your Phone Is More Open to Attack When you jailbreak your device and enable SSH, it's more accessible

ILLUSTRATION BY ALEX EBEN MEIER

from the outside than it once was. Far too many people jailbreak their phone (or purchase a jailbroken and unlocked phone) without then changing the device's default root password. And some of those people have suffered in the form of baddies breaking into their device.

Your Battery Life Could Suffer Some third-party apps and processes care very little about how much power they pull from your iOS device. If you're running some of these things on your iPhone, iPod touch, or iPad, your battery could drain in short order.

Your Phone Could Become Less Stable Say what you will about the sometimes-quirky nature of the App Store's approval process, at least the apps there have been vetted—hopefully to the point where they shouldn't take down the entire device when they crash. There's no guarantee that apps offered via Cydia will be as stable.

Apple and Your Warranty Jailbreaking your phone may be legal, but Apple makes it clear that it considers the process a violation of your end-user agreement. Anecdotal evidence suggests that if you walk into an Apple Store with a misbehaving and jailbroken iPhone in the hope of getting some help with it, you'll be politely turned away.

Updates and Jailbreaks Apple hasn't gone out of its way to issue updates that intentionally damage jailbroken iPhones. Given the company's history of largely turning a blind eye to jailbreaking and the added ruling that jailbreaking and unlocking are legal, it's highly doubtful that Apple will take any deliberate action to decommission jailbroken phones. At the same time, Apple isn't likely to spend much time thinking about the effect an update may have on jailbroken iOS devices. It's possible that an update will come along that does threaten a jailbroken or unlocked iOS device, so people with these jailbroken devices must be vigilant about how and when they update their gear.

iPads and iPhones: Current Lineup

PRODUCT	SPECS	RATING	PRICE [A]	DISPLAY	PERFORMANCE	FIND CODE [B]
iPad	16GB	Wi-Fi, ●●●●; 3G, ●●●●	Wi-Fi, $499; 3G, $629	9.7-inch color	Up to 10 hours on Wi-Fi; up to 9 hours on 3G	6000 Wi-Fi 6001 3G
	32GB	Wi-Fi, ●●●●; 3G, ●●●●	Wi-Fi, $599; 3G, $729	9.7-inch color	Up to 10 hours on Wi-Fi; up to 9 hours on 3G	6002 Wi-Fi 6003 3G
	64GB	Wi-Fi, ●●●●; 3G, ●●●●	Wi-Fi, $699; 3G, $829	9.7-inch color	Up to 10 hours on Wi-Fi; up to 9 hours on 3G	6004 Wi-Fi 6005 3G
iPhone 3GS and 4	8GB (3GS)	●●●½	$99	3.5-inch color	9 hours of Wi-Fi Internet; 5 hours of 3G talk time	62SS
	16GB (4)	●●●●	$199	3.5-inch color (Retina)	10 hours of Wi-Fi Internet; 7 hours of 3G talk time	62S6
	32GB (4)	●●●●	$299	3.5-inch color (Retina)	10 hours of Wi-Fi Internet; 7 hours of 3G talk time	62S7
iPod Touch	8GB	●●●●½	$229	3.5-inch color	40 hours of music playback; 7 hours of video playback	6SS3
	32GB	●●●●½	$299	3.5-inch color	40 hours of music playback; 7 hours of video playback	6554
	64GB	●●●●½	$399	3.5-inch color	40 hours of music playback; 7 hours of video playback	6S55

[A] All prices are Apple's prices. [B] In a browser's address field, typing in a find code after *macworld.com/* takes you to a product's review or overview.

Apple Releases One iOS Update, Preps Another

BY DAVID CHARTIER

As Apple unveiled new iPods (see our reviews on page 68), the company also released an update to its mobile operating system. And it has another iOS update waiting in the wings.

Released in September, iOS 4.1 introduces a number of new features to the iPhone and iPod touch while also fixing some lingering iOS 4 bugs. That includes a fix for the proximity sensor issue in which some iPhone 4 screens would activate improperly during phone calls, as well as fixes for Bluetooth connectivity issues. The update also tackles problems with iOS 4's performance on older devices like the iPhone 3G.

As for features, iOS 4.1 adds support for high-dynamic range photos—three photos shot in rapid succession with different exposure ranges and then combined into one photo featuring the widest color and exposure range possible. The update also lets users upload full HD videos over Wi-Fi and rent TV shows through the iTunes Store.

iOS 4.1 introduces Game Center, a feature first previewed back in the spring. Game Center allows developers to better implement multiplayer features into their games while letting players more easily challenge their friends to matches.

That won't be the last of Apple's iOS updates this year. In November, the company plans to release iOS 4.2, which will work on all its mobile handhelds, including the iPad. iOS 4.2 will deliver 4.1 features to iPad users as well as support for wireless printing. (You can get a preview of the changes delivered by iOS 4.2 at macworld.com/6574.)

Coming Attractions: HBO, Verizon iPad Streaming Apps

BY SERENITY CALDWELL

HBO is balking at striking a deal to stream its programming via Netflix, fueling speculation that the cable channel wants to build off its subscription service and release an exclusive iPad app. Netflix currently offers an iPad app (macworld.com/6473) that lets subscribers watch TV shows and movies on their mobile device. But HBO copresident Eric Kessler told Bloomberg (macworld.com/6530) that his company believes "there is value in exclusivity" regarding online streaming, and he wants to focus the company's efforts solely toward HBO subscribers.

Currently, HBO Go allows subscription holders to watch up to 800 hours a month of original television programming, sports, and older theatrical releases on their desktop or laptop computer. Within six months, however, HBO plans on expanding the service to include streaming to the iPad and other mobile devices.

Meanwhile, Verizon is also in the midst of developing an iPad app that will allow its FiOS home broadband subscribers to stream live content. The company has demoed a series of new video applications—including one for the iPad—that stream live content from customers' cable TV subscriptions to a mobile device. While most of the app's technical work is finished, the app isn't expected to arrive until 2011.

When the app does become available, FiOS subscribers will only be able to watch their programming on an iPad within their own homes. This allows Verizon to verify that the person streaming the video is, in fact, the person paying for the subscription. This is mentioned as just the *initial* part of the rollout, so hopefully Verizon can figure out a way in the future to authenticate subscribers without necessarily chaining an iPad to a customer's living room.

Spotlight on iPhone 4 Cases: MoGo Talk XD

Maybe you're intrigued by Bluetooth headsets, but have given up on the accessory because those tiny things always seem to get left at home, washed with your clothes, or destroyed in a variety of other sometimes hilarious but always expensive ways. ID8-Mobile's MoGo Talk XD (macworld.com/6531) may just be the solution to all our problems: it's a kit made up of a Bluetooth 2.1 headset and an iPhone 4 case that's specifically designed to store the headset. Just stash the headset in the case whenever you don't need to use it. The $100 price for the complete kit is comparable to the cost of many high-quality headsets alone, although the case adds a bit of bulk to the otherwise slim iPhone.—MARCO TABINI

What's New at the App Store

Text Editor Taps into Dropbox

Pairing an iPad app with the Web-based Dropbox storage service means your documents are never too far away. Elements—Dropbox Powered Text Editor (macworld.com/6528), a $5 offering from Second Gear, lets you create and edit text files that automatically save to your Dropbox account. If a network connection isn't handy, Elements saves all your offline work, uploading changes once you reconnect. The app offers some text-customization features and support for the TextExpander text-snippet app.—DAVID CHARTIER

Zagat Adds Foursquare Integration

Handmark has updated the mobile version of its $10 Zagat restaurant guide to include integration with the location-based Foursquare service. With Zagat To Go 4.0 (macworld.com/5519), users with Foursquare accounts can check into any restaurant directly from the app. Other changes include the addition of thousands of photos from the Foodspotting Website and Zagat Dining Journal, in which users can post their own restaurant reviews and ratings.—DAVID DAHLQUIST

Calvetica Looks to Replace Calendar App

Nimble Studio hopes to take the drudgery out of creating calendar events with its $3 Calvetica app (macworld.com/6529). The developer says it takes just two taps to add an event and assign a time with Calvetica.

The app uses iOS 4's shared calendar features, which allow Calvetica to edit your default calendar, and the 2.0 update added multiple-calendar support.—DAVID CHARTIER

Power up to win 1 of 7 APC BR700G Battery Back-UPS™ units (a $130 value)!

Key Code
w183w

www.apc.com/promo
888-289-APCC x8334
FAX: 401-788-2797

Name: _____ Title: _____

Company: _____

Address: _____ Address 2: _____

City/Town: _____ State: _____ Zip Code: _____ Country: _____

Phone: _____ Fax: _____

e-mail: _____

☐ **Yes! Send me more information via e-mail and sign me up for the Uptime™ e-mail newsletter. Key Code: w183w**

What type of availability solution do you need? ☐ UPS: 0–16kVA (Single-phase) ☐ UPS: 10–80kVA (3-phase AC) ☐ UPS: 80+ kVA (3-phase AC) ☐ DC Power ☐ Networking Enclosures & Racks ☐ Air Conditioning ☐ Cables/Wires ☐ Monitoring & Management ☐ Line Conditioning ☐ Mobile Protection ☐ Surge Protection ☐ UPS Upgrade ☐ Don't Know

Purchase time frame? ☐ < 1 Month ☐ 1–3 Months ☐ 3–12 Months ☐ >1 Year ☐ Don't Know

You are (check one) ☐ Home/Home Office ☐ Business (<1000 employees) ☐ Large Corporation (>1000 employees) ☐ Government, Education, Public Organization ☐ APC Sellers and Partners

APC by Schneider Electric

©2010 Schneider Electric Industries SAS, All Rights Reserved. Schneider Electric, APC, Back-UPS, and Uptime are owned by Schneider Electric, or its affiliated companies in the United States and other countries. e-mail: esupport@apc.com • 132 Fairgrounds Road, West Kingston, RI 02892 USA 998-2516a

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT # 36 WEST KINGSTON RI

POSTAGE WILL BE PAID BY ADDRESSEE

APC

ATTENTION CRC: **w183w**
132 FAIRGROUNDS RD
PO BOX 278
WEST KINGSTON RI 02892-9920

An iMac can do just about anything.

Now, it can even run without power.

Introducing the reinvention of backup power—the APC Back-UPS™: unsurpassed protection for iMac® and more.

Reliable power backup for 24/7 availability

Whether creating digital projects, updating your Facebook® status, or working furiously to meet a deadline, you depend on your iMac every day, all day. That's why APC by Schneider Electric™ has designed battery backup units that protect that uninterrupted availability you expect from your iMac. Introducing the reinvention of backup power protection: the APC Back-UPS!

Energy-efficient protection for peace of mind

When the power goes out, our Back-UPS units go to work. They instantly switch your iMac to emergency power, allowing you to work through brief power outages or safely shut down so you won't lose valuable files. They also feature surge outlets to safeguard your electronics and data from "dirty" power and damaging power surges—even lightning. Plus, their energy-efficient design reduces electricity use, so you start saving money the minute you plug in a Back-UPS. And power-saving outlets automatically shut off power to unused devices when your iMac is turned off or on standby, eliminating wasteful electricity drains.

Trusted insurance for what matters most

Our units protect your iMac and much more, including MacBook®, wired and wireless networks, DVRs, gaming consoles, and external storage devices. APC Back-UPS is the trusted insurance you need to stay up and running and protected from unpredictable power and energy waste!

Keep your electronics up and your energy use down!

Back-UPS models are available with the features and runtime capacity that best suit your application, and many models have been designed with power-saving features to reduce costs.

The High-Performance Back-UPS Pro Series

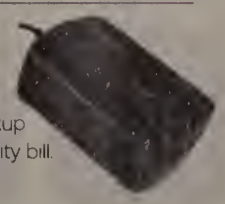
High-performance Back-UPS Pro units deliver cost-cutting, energy-efficient features. Power-saving outlets automatically shut off power to unused devices when your computer is turned off or is on standby, eliminating wasteful electricity drains.
(BR700G shown above)

The energy-efficient ES 750G

The Back-UPS ES 750G boasts innovative power-saving outlets, which automatically shut off power to unused devices when your computer is turned off or is on standby, eliminating wasteful electricity drains.

- 10 Outlets • 750 VA/450 Watts
- 70 Minutes Maximum Runtime
- Coax and Telephone/Network Surge Protection

The best-value ES 550G



The Back-UPS ES 550 uses an ultra-efficient design that consumes less power during normal operation than any other battery backup in its class, saving you money on your electricity bill.

- 8 Outlets • 550 VA/330 Watts
- 43 Minutes Maximum Runtime
- Telephone Surge Protection

Power up to WIN 1 of 7 APC BR700G Battery Back-UPSs (a $130 value)!

Visit www.apc.com/promo Key Code w183w • Call 888-289-APCC x8334 • Fax 401-788-2797

APC™ by Schneider Electric

©2010 Schneider Electric Industries SAS, All Rights Reserved. Schneider Electric, APC, Back-UPS, and Legendary Reliability are owned by Schneider Electric, or its affiliated companies in the United States and other countries. All other trademarks are property of their respective owners. e-mail: esupport@apc.com • 132 Fairgrounds Road, West Kingston, RI 02892 USA • 998-2743

APPST

From media managers to Twitter tools (and ev

RAVAGANZA!

When the voice-over announcer for Apple's TV ads tells you, "There's an app for that," it's more than just an advertising slogan. Think of all the things you can do on the Mac—edit and share photos, prepare reports, flex your multimedia muscles, blow off steam with a few games—and there's an app (or even several apps) that can do the exact same thing on your mobile device. We've combed through thousands of our iOS app reviews to assemble collections of apps aimed at helping you get things done, stoking your creative muse, keeping you entertained, and doing much more. Maybe these collections will help you find the apps you're looking for—or discover things to do with your iPhone, iPad, or iPod touch that you hadn't even considered.

ning in between), here are 117 iPhone, iPod touch, and iPad apps for every interest and occasion

GENTLY DOWN THE STREAM

Storing music and movies on your iOS device is so old-fashioned. With a hearty Wi-Fi connection and the right apps, you can stream media to your iPhone, iPod touch, or iPad.—CHRISTOPHER BREEN

At the Movies

At the risk of insulting a small portion of our readers, if you have one of Apple's iOS devices and a Netflix subscription but don't have the Netflix app, you're doing something wrong. The device, subscription, and mobile app form a natural trio. **Netflix** has significantly beefed up its streaming catalog, so you can now find movies and TV shows you'll actually want to watch. And over a reasonably fast Wi-Fi network, the content looks good, especially on the iPad's supersized screen.

free; Netflix; macworld.com/6473

Hulu Dance

Video-on-demand has arrived, though in subscription form and, often, laden with commercials. That describes the free **Hulu Plus**. For $10 a month, you can stream Hulu to your iPhone, iPod touch, and iPad. While you get just as many commercials as you do with the free version, you'll find complete seasons of popular shows and higher-resolution video.

free; Hulu; macworld.com/6471

Streaming Sensation

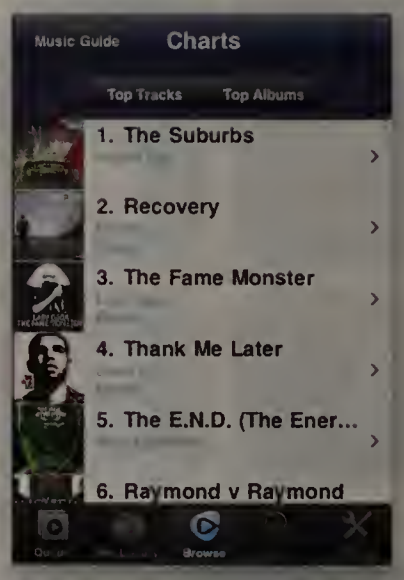
Streaming tunes from your Mac to your iOS device is like having your own radio station. Just turn to Rogue Amoeba's $25 Airfoil (macworld.com/1439) and the free **Airfoil Speakers Touch** app. The Mac-based Airfoil takes care of broadcasting any sound your Mac can make. After launching both apps, simply tell Airfoil to broadcast to your iOS device, and you've got a broadcast to call your own.

free; Rogue Amoeba; macworld.com/6474

Bohemian's Rhapsody

Rhapsody is a music subscription service that gives you browser- and iOS device–based access to more than 10 million tracks for $10 a month. Like the Rdio service and its companion app for the iPhone, the **Rhapsody** app lets you not only listen to streaming music over Wi-Fi and 3G networks, but also download tracks to your iOS device so that you can listen when a wireless network isn't available. That $10 a month lets you connect a single iPhone, iPod touch, or iPad to the service. For $15 a month, you can provide access to as many as three such devices.

free; Rhapsody International; macworld.com/6472



TYPE GEEKS, UNITE

If you've seen the movie *Helvetica* multiple times or argued with others about the merits of Comic Sans, then you need these font-focused apps on your mobile device right now.—BEAU COLBURN

For the Gaming Type

Maybe you can spot the difference between Helvetica and Arial, but how deep do your font-recognition skills run? **The Font Game** quizzes you on 30 different examples, with the clock ticking down the whole time. Each example has four different font names listed below it, and you simply tap on your choice to advance. You're notified immediately if you chose wisely; when your round is complete, you can review your picks to see where you made your mistakes. (As if you would make mistakes.) You can compete against yourself for personal best records, or submit your high scores to the online Hall of Fame.

$1; Justin Stahl; macworld.com/6476

Typography Bibliography

The Typography Manual is an excellent resource for people who have an interest in fonts and type, whether they're pros or amateur type enthusiasts. Covering topics such as the history of type, the basics of typesetting, and proper use of type on the Web, The Typography Manual also includes a handy style guide in case you need a quick refresher on when to use a semicolon instead of a comma.

$4; Justin Stahl; macworld.com/6475

EXTEND YOUR DESKTOP

Don't choose between your Mac and your mobile device. With these clever iOS apps, you can make your favorite Apple-built gear work in tandem.

—LEX FRIEDMAN

Air Apparent

Air Display turns your iPhone or iPad into a wireless second monitor for your Mac. After downloading the app, you install a free custom preference pane on your Mac to turn your iPhone or iPad into an extension of your desktop. You can position your iOS device in either orientation, and you can even use your finger as a makeshift mouse on the touchscreen.

$10; Avatron Software; macworld.com/6289

Mirror, Mirror

While Air Display extends your Mac's screen, **Mocha VNC** mirrors it. If you decide to step out into your yard while you wait for a large download to finish, you can use the app to see how things are going. Even better, you can use your finger as a virtual mouse, or take advantage of the touch-screen keyboard if you need to type. Depending on your network setup, you can even use Mocha VNC to control your Mac remotely.

$6; MochaSoft; macworld.com/6467

File Mover

In the pre-iOS era, you could use your iPod as a portable hard drive by enabling something called Disk Mode. The iPhone doesn't offer such an option, but apps like **Briefcase** solve that problem for you. Briefcase makes transferring files between your Macs and your iPhone totally painless by automatically discovering Macs on your local network via Bonjour and transferring files and directories in either direction. The app can also view common file formats—images, Pages and Microsoft Word documents, PDFs, and the like—so that you can read them on the go.

$5; Michael Taylor; macworld.com/6466

Helpful, Helpful Hippo

HippoRemote Pro is absolutely awesome for two reasons: First, by design, the iPhone app can masterfully control a Mac mini that you've set up as a media center. The app turns your iPhone into a Wi-Fi remote control, perfect for navigating Front Row, Hulu, or DVD Player. You can also use HippoRemote Pro as a wireless virtual track-pad in lieu of a mouse. Like Apple's Magic Trackpad, Hippo supports Multi-Touch gestures such as pinching and zooming and two-finger scrolling.

$5; RoboHippo; macworld.com/5493

LIST No.1

MADE IN CUPERTINO

Apple makes more than just the mobile hardware you enjoy; it also produces a few iPhone and iPad apps of its own (macworld.com/6500).

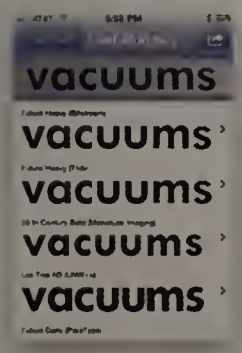
1. **Remote**
   free; Apple
2. **Texas Hold'em**
   $5; Apple
3. **Keynote Remote**
   $1; Apple
4. **Apple Store**
   free; Apple
5. **Find My iPhone**
   free; Apple

LIST No.2

WORKS WITH A MAC

These apps don't live by iOS devices alone; they also work with companion applications on your desktop or laptop (macworld.com/6499).

1. **FileMaker Go**
   $20; FileMaker
2. **OmniFocus for iPad**
   $40; The Omni Group
3. **Firefox Home**
   free; Mozilla
4. **TextExpander**
   $5; Smile
5. **Bento for iPad**
   $5; FileMaker



Font Finder

Have you ever spotted a font somewhere and wondered what it was? With **WhatTheFont**, you just take a photo with your iPhone's camera, and the app will retrieve a list of possible matches to help you ID the font that caught your eye.

free; MyFonts; macworld.com/6478

Quick on the Draw

The iPhone's touchscreen makes for a fun drawing surface. With **TypeDrawing**, you can create your own images by using nothing but letters. To get started, all you do is enter a word or phrase, choose your font and size, and start drawing with your finger. As you move over the screen, your words form shapes and lines in the patterns you've outlined. There's even a variable speed setting, which creates small type as you slowly move across the screen, and big, bold type when you use fast movements.

$2; Hansol Huh; macworld.com/6477

LOCATION, LOCATION, LOCATION

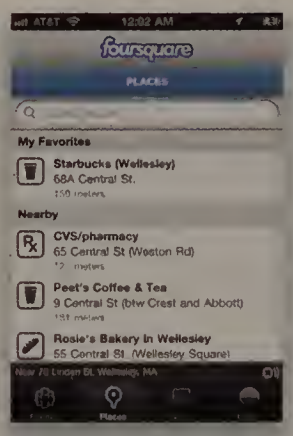
It's not always who you know—it's where you are as well. These apps help make the most of your location.

—BEAU COLBURN

Word on the Street

Waze puts a social spin on the time you spend in the car, enabling users to report traffic delays. When you come in range of a trouble spot, the hybrid app alerts you. Built-in turn-by-turn directions, combined with handy tips along the way, make Waze a helpful companion.

free; Waze; macworld.com/6480



The Mayor of the App Store

Wondering what all the fuss is about with **Foursquare**? Just launch the free app on your GPS-enabled iPhone, and it finds the venue closest to you. You earn points by checking into spots; the more you check in, the better your chances of becoming "Mayor" of a given spot. Foursquare makes it easy to follow your friends and add some competition to your daily routine.

free; Foursquare; macworld.com/6479

Stay in the Loopt

Like Foursquare, **Loopt** offers a way to know where your friends are and what they're doing, but with a slightly different approach. Loopt users can quickly glance at their map to see all nearby friends, events, and suggested spots. For a steady stream of updates, keep the app running in the background on iOS 4. Less about competition, Loopt puts its focus on quick access to your fellow "Looptster" friends.

free; Loopt; macworld.com/4207

Find Out What's Good

The Yelp.com Website has been providing customer-generated reviews for eating and drinking establishments for many years, and being able to access that information on your iPhone via the mobile version of **Yelp** makes the service even more convenient. You're probably aware of the best pizza in your neighborhood, but what if you're traveling and have a craving for a good slice? Just type `pizza` into the app, and you'll get a listing of pizza joints around you, complete with comments and ratings. (And of course, Yelp's powers aren't limited to eateries—the app helps you find all kinds of businesses.) A recent update to the app added the ability to check in Foursquare-style; and the app now supports multitasking, too.

free; Yelp; macworld.com/3916

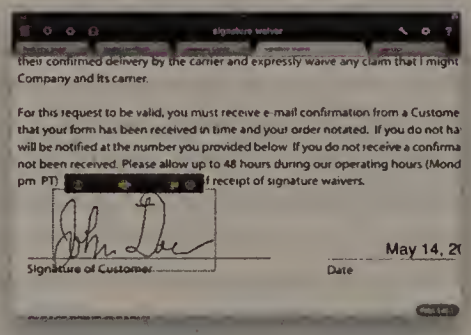
PLAY NICE WITH DROPBOX

What makes Dropbox so incredible? Maybe it's that so many apps work so well with the service.—LEX FRIEDMAN

Take Note

While Office2 HD and the Dropbox app itself can both view PDFs, they can't *do* anything with them. That's where **iAnnotate PDF** comes in. This iPad app truly lets you have your way with your PDFs, allowing you to mark them up in a host of ways. You can add text notes, highlights, underlines, free-form drawings, and bookmarks. The app also gives you a great way to sign PDFs—with your finger instead of a pen—without having to print anything. And of course, iAnnotate PDF integrates beautifully with Dropbox.

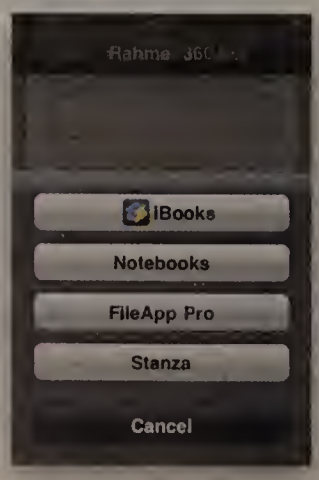
$10; Aji; macworld.com/6469



Dropbox on the Rise

The hybrid **Dropbox** app lets you browse all the files and folders you've stored on the service from your mobile device. The app can view PDFs, Pages and Microsoft Word documents, and images; it can also send files of any type to other compatible apps on your device. I only wish that every document-creation app featured a Send To Dropbox button. Fortunately, a couple other apps help out....

free; Dropbox; macworld.com/5593



Office Mate

The superb **Office2 HD** productivity suite gives iPad users the ability to create and view documents and spreadsheets. But the app also features terrific Dropbox integration. You can open, edit, save, rename, and delete files stored through Dropbox. (On top of that, Office2 HD offers support for Google Docs, MobileMe, and other cloud-based storage services.) The $8 app is a fine editor, with an impressive feature set, but it's the Dropbox integration that elevates Office2.

$8; Byte2; macworld.com/6468

LIST No. 3

SHOP SMARTER

Before you head for the cash register, turn to these apps to make sure you're getting a good deal (macworld.com/6503).

1. **RedLaser**
   free; Occipital
2. **Amazon Mobile**
   free; Amazon.com
3. **eBay Mobile**
   free; eBay
4. **Grocery Gadget**
   $5; Flixoft
5. **Valpak Local Coupons**
   free; Valpak Direct Marketing Systems

ANGRY BIRDS

#1 Best Selling iPhone Game Ever!

FOR THE SHUTTER-BUG SET

From setting up a shot to sharing the resulting image, the iPhone can be a photographer's best friend.

—BEAU COLBURN

Toy with Your Photos

As soon as you launch **Hipstamatic**, your iPhone transforms itself into a toy camera. The touchscreen becomes a camera's back panel, and your shot is framed through a small viewfinder. Hipstamatic's signature look comes from mixing the app's film types, lenses, and flashes in unique combinations. Hipstamatic allows you to create interesting, retro images that are as fun to look at as they were to take.

$2; Synthetic; macworld.com/5933

Fun with Filters

If you're looking for a simple app that can quickly give your photos a new look, **CameraBag** fits the bill. The app works by applying a basic filter to your selected image. You can choose any of 14 filters—ranging from black-and-white to fish-eye—not to mention a number of toy camera styles. With a wide variety of filters to choose from, CameraBag can quickly improve the look of many iPhone photos.

$2; Nevercenter; macworld.com/4144

Gorilla's-Eye View

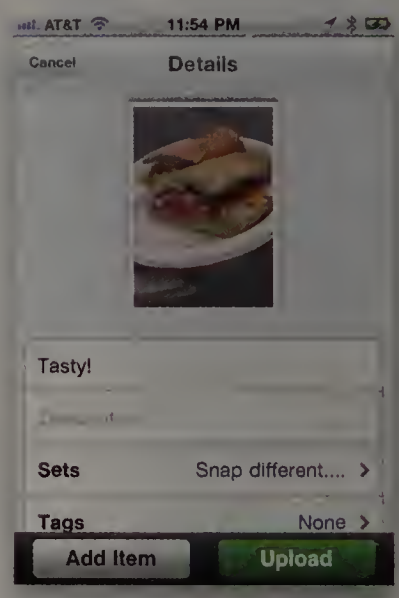
There are some apps you may not use frequently, but when you need them, you're glad to have them. Take **Gorillacam**. The app provides iPhone-toting photographers with tools such as a level, a self-timer, and a time-lapse mode that can help you get the shot you have in mind. Other tools like 3-Shot Burst mode, and an option to press anywhere on the iPhone screen to take a photo, round out this helpful app.

free; Joby; macworld.com/5909

Share and Share Alike

Flickr is one of the Web's most popular photo-sharing sites; its official self-titled app makes simple work of uploading photos to your account, searching the site, and browsing your contacts. With the **Flickr** app, it's easy to organize your online photos by adding detailed titles, descriptions, and tags, and by sorting the images into sets. As you upload your photos, you can add any of this information, as well as tag the location.

free; Yahoo; macworld.com/6491



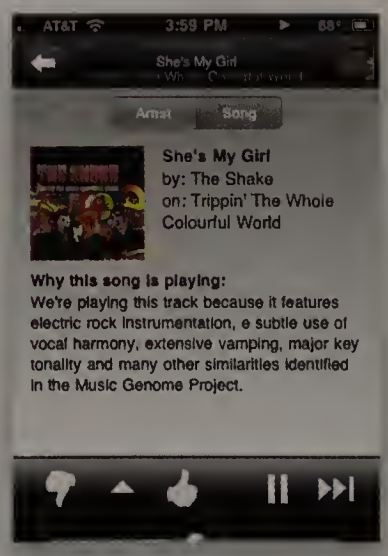
MULTI-TASKING MARVELS

The best feature of the iOS 4 upgrade? Multitasking. These three apps offer excellent examples of iOS 4 multitasking in action.—LEX FRIEDMAN

Let the Music Play

Tell **Pandora Radio** what music you like—whether by artist, composer, or song title—and the free app starts streaming similar music. Now, with iOS 4, the magic continues—Pandora can keep playing music even while you're using other apps. Better yet, when you double-tap the Home button to expose the iPod controls, they'll actually work for the Pandora app instead.

free; Pandora Media; macworld.com/6022



Stay on Course

Among the many turn-by-turn navigation apps available for the iPhone, **Navigon MobileNavigator** has earned high marks for its GPS features—text-to-speech for announcing road names, lane and speed assist, 2D and 3D views, a single-tap Home button, and more. Even better, of course, is that with iOS 4 it's OK to take calls or check your e-mail while Navigon is guiding you; even when running in the background, the app keeps track of where you are. Since Navigon supports fast-app switching, you can switch right back to the app when you're ready to consult the map again.

$60; Navigon; macworld.com/5778

Call Waiting

The free **Skype** app for the iPhone doesn't yet support video conferencing, but that's where its limitations end. You can place Skype calls over Wi-Fi and 3G, and the audio quality is vastly better than a regular cell phone call. But what makes Skype on iOS 4 so remarkable is that you can exit the app but remain logged in for receiving calls, and you can keep talking to your Skype compatriots while playing games, checking e-mail, or otherwise using your iPhone.

free; Skype Software; macworld.com/4757

©2010 booq. All rights reserved. Booq and the b tob ore registered trademorks of Booq LLC.

booq

Create new realities

Bag: Cobra courier XS, iPod messenger ($145.00), visit booq.com for more details.
Model: Mothew Chaney, AIA/LEED AP/DBIA (Associote, Ehrlich Architects). Photogrophy: Erik Borzi (erikborzi.com)

THE BOOK LOVER'S iPAD

The iPad may not sport a Retina display, but it still offers a great experience thanks to these apps.

—LEX FRIEDMAN

Easy Reeder

Reeder is easily the best news-reader, on any platform, that I've ever used. It elegantly organizes all of my feeds and syncs my subscriptions via Google Reader. This speedy, intuitive app is a pleasure to use.

$5; Silvio Rizzi; macworld.com/6300

Kindling Interest

Apple's free iBooks app (macworld.com/6254) is great, but Amazon's free **Kindle** e-reading app is even better. It connects with Amazon's Kindle bookstore and its broad selection of e-books. It also handles both daytime and night reading with aplomb, thanks to its ability to adjust brightness as needed. Kindle also lets you tap on any word to see its definition and search for any word or phase in seconds. If you use the app on both your iPhone and your iPad, your current page is always kept in sync, so you'll never lose your place.

free; Amazon.com; macworld.com/6020

Instapaper's Gonna Get You

Why should you use **Instapaper**, a Web service with a corresponding $5 universal app, to organize what you come across on the Web? Convenience. First off, Instapaper grabs only the important stuff: the article's text and inline images, and not the flashing ads competing for your attention. Even better, it's a great way to file away lengthier articles that you don't have time to look at right away. Best of all, reading articles on your iPad's glorious screen quickly feels a lot more natural than scrolling through them on your Mac.

$5; Marco Arment; macworld.com/6018

Flipping Out

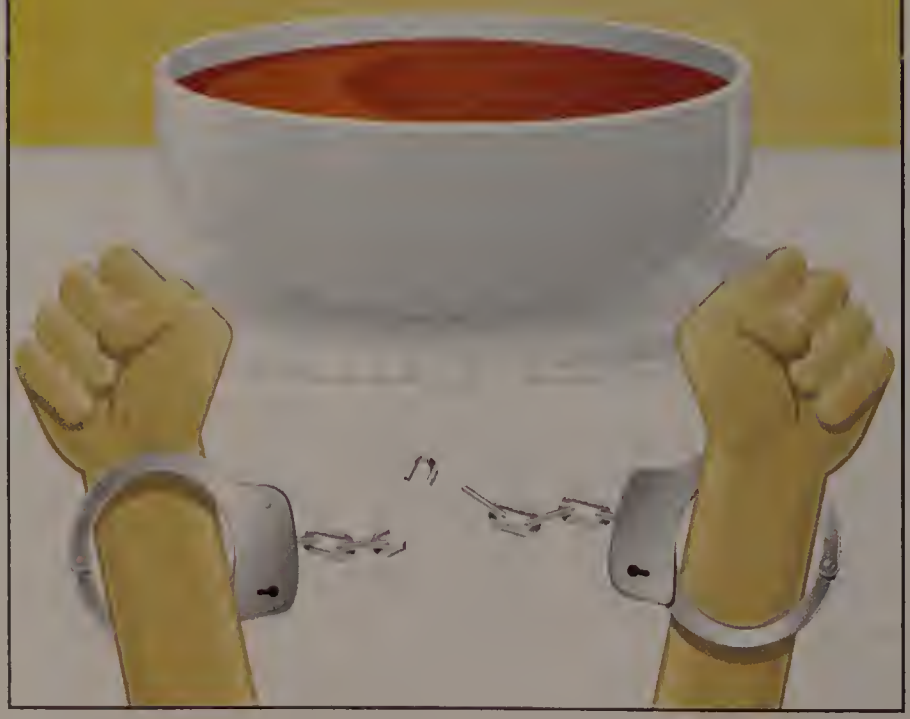
FlipBoard does a stellar job of scanning through your Twitter timeline and Facebook newsfeed to turn links shared by your friends into a deliciously touch-able interface. You can also use the app to subscribe to other feeds, covering all the major topics—headlines, sports, pop culture, politics, tech, and more.

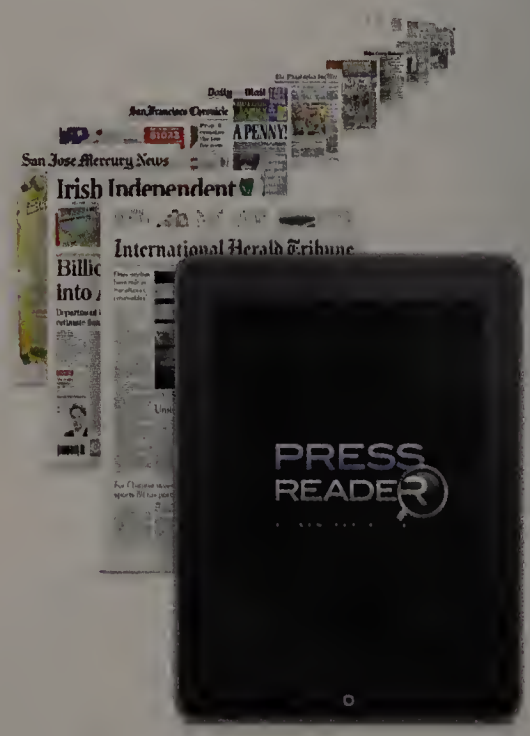
free; Flipboard; macworld.com/6465

WEIRD LAWS

It is illegal to slurp soup in...

Find out where when you go to
www.weirdla.ws/macworld
and download the weird laws app!





1,700+ Full-Content Newspapers
Only One Application

1 Week FREE TRIAL
Register with Offer Code: Macworld
www.pressreader.com

BACK TO THE DRAWING PAD

If you look at your iPad and see a blank canvas, these apps can help your creative muse take flight.

—TIM MERCER

The Animated iPad

Creating hand-drawn animation isn't always the most riveting exercise, but **Animation Creator HD** gives you a slew of tools that can make the process run a little smoother. A layer-positioning tool helps you reposition any of the three layers you can create in each frame, while support for onion skinning helps create a more fluid animation.

$2; Red Software; macworld.com/6495

Sketching Things Out

Along with Brushes (macworld.com/6272) and Layers, **SketchBook Pro** makes up an impressive trio of iPad drawing apps. It offers a unique symmetry tool to mirror every stroke you make and features a powerful brush engine.

$8; Autodesk; macworld.com/6497

Color Coordinator

The iPhone version of Color Splash (macworld.com/6296) helps make photos stand out by stripping images of nearly all their color—save for a few select details. The process works even better with **Color Splash for iPad**, which takes advantage of that device's larger screen to keep the focus where it should be—on your image—instead of forcing you to fiddle with settings.

$2; Pocket Pixels; macworld.com/6498

A Multilayered Approach

Layers—Pro Edition for iPad offers both inspiration (an extensive online gallery) and formidable painting tools, including multilayer support and an offset brush tip so you can better see the strokes you make.

$6; Gotow.net; macworld.com/6496

LIST No.4

IT'S YOUR MOVE

It's more fun to play with others. These asynchronous turn-based universal games mean you'll never be lonely (macworld.com/6504).

1. **Strategery**
   $2; Affogato
2. **Words with Friends**
   $3; Newtoy
3. **Formation**
   $4; Chris Hellmuth
4. **Lunar Chess**
   free; Neon Surge
5. **Backgammon HD**
   $3; Trivial Technology

EAT, DRINK, AND BE MERRY

When it's time to prepare a meal, mix a cocktail, or figure out where to dine out, turn to these apps.

—PHILIP MICHAELS

In Vino Veritas

I'll be honest—after a couple of glasses of a good red, I have a hard time remembering anything, let alone the exact data on what I happen to be drinking. Fortunately, **Drync Wine Pro** does an excellent job of logging the wines you've drunk, those you've enjoyed, and the varietals you'd like to buy. A handy Quick Notes feature lets you jot down notes for tracking down that exquisite merlot.

$5; Drync; macworld.com/5847

LIST No.5

LET THE BRAINSTORM BEGIN

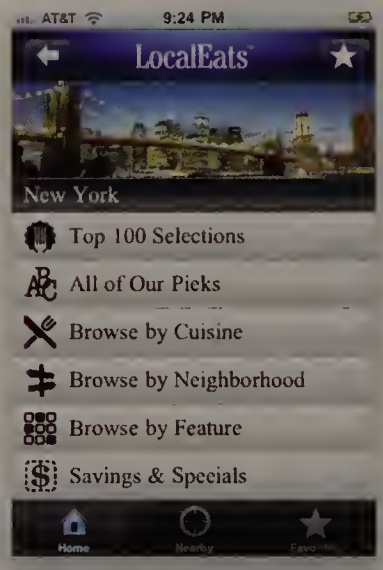
You never know when inspiration might strike, so be sure to have these mobile apps handy for your next big idea (macworld.com/6505).

1. **Mindjet**
   $8; Mindjet
2. **Corkulous**
   $4; Appigo
3. **Popplet**
   $9; Notion
4. **Whiteboard HD**
   $6; Avici Software
5. **iBlueSky**
   $10; Tenero Software

I'll Drink to That

Cocktails HD is essentially an e-book dedicated to the libationary arts, though that description hardly does justice to the amount of info packed into this iPad app or the clever way it's presented. Drop-down menus let you jump from the app's home page to chapters on tropical, classic, and other assorted drinks. Once you land on an ingredient page, a slider helps you easily jump to other sections where you can learn the finer points of making garnishes, coating the rim of a glass, or muddling mint leaves.

$5; Pocket Cocktails; macworld.com/6464



Good Eats

When I'm in a strange city far away from home, the last thing I want to do is have a bland meal in a soulless chain restaurant. That's why **LocalEats** has been a fixture on my iPhone since Apple gave the go-ahead to third-party apps. LocalEats lists the top restaurants in more than 50 cities as determined by local gastronomes. And WhereTheLocalsEat.com keeps updating the app, adding new features like search-results filtering and, in some markets, coupons for restaurants.

$1; WhereTheLocalsEat.com; macworld.com/4203

LIST No.6

FURRY, FINNED & FEATHERED FRIENDS

Become a master of the animal kingdom—or find yourself a four-legged companion—with the help of these apps (macworld.com/6502).

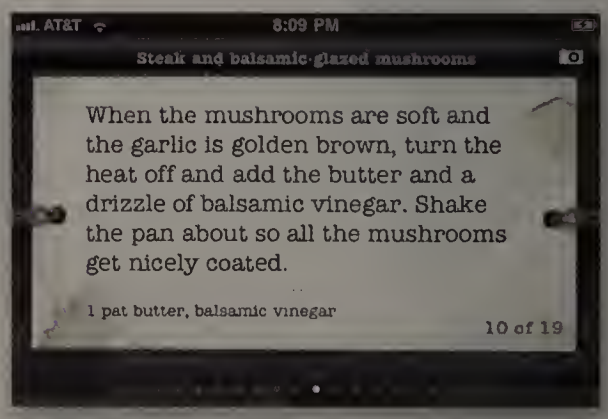
1. **Petfinder.com**
   free; Phunware
2. **Audubon Mammals**
   $10; Green Mountain Digital
3. **Reef Fish Hawaii**
   $5; Indigo Publications
4. **iBird Yard Plus HD**
   $5; Mitch Waite Group
5. **Pet First Aid**
   $4; Jive Media

Grill Master

Scores of backyard cooks claim to have perfected the art of grilling. Load up **Weber's On the Grill** on your iPad, and you'll be secure in the knowledge that you've mastered fire. The iPad app—and its similarly named and priced iPhone version—offers tips and tricks for both charcoal and gas grills, as well as recipes and a list of essential tools every good griller needs.

$5; Weber-Stephen Products; macworld.com/6462

Mobile Mise en Place



If only every dinner I prepared could be as orderly and well assembled as **20 Minute Meals**, the Jamie Oliver-backed recipe app from Zolmo. The app offers dozens of recipes—from pastas to salads to stir frys—but it's the organizational details that prove to be the true delight here. Tabs allow you to toggle between the ingredients you'll need, the equipment you'll use, and the steps you'll take to prepare a dish. You can scroll easily from step to step in portrait mode, or flip your iPhone sideways to also view pictures of each step and get the occasional audio tip from Jamie Oliver himself. Helpful how-to videos and advice on keeping your pantry stocked round out this aspiring chef's delight.

$8; Zolmo; macworld.com/6463

Build Your Own Apps!

Over 1000 titles published to the iTunes App Store

by people just like you!

GameSalad is the world's most advanced game creation tool for non-programmers. With GameSalad, game makers of all levels can bring their ideas to life without programming a single line of code. Build games visually using a drag-and-drop interface along with a robust behavior system. Publish your games quickly and easy to the iPhone, iPod Touch, and the iPad.

Download GameSalad for free at
GameSalad.com

© Gendai Games Inc. All rights reserved. GameSalad is a registered trademark of Gendai Games Inc.

THE SPORTING LIFE

On the iPhone and iPad, all you need are nimble thumbs and a flick of the wrist to finally realize your athletic glory.

—CHRIS HOLT

Hook, Line, and Sinker

Fishing Kings uses the iPhone's accelerometer brilliantly. You cast by flicking your iPhone, and then watch as the camera goes underwater with the lure so you can see all the fish below the surface and watch the fight as it happens.

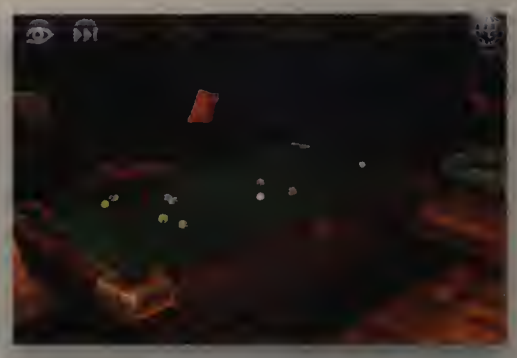
$1; Gameloft; macworld.com/6483

Get into the Swing of Things

Let's Golf HD shines on the iPad. The visuals are simply lovely—the game's cartoonish aesthetic works well, almost overshadowing the impressively nuanced golfing game underneath. The 3D holes are gloriously rendered, and the attention to graphic detail is superb, but the game also comes loaded with options. You can play three random holes, play subsets of specific courses, try a specific hole, or compete against other players.

$5; Gameloft; macworld.com/6273

Pool Party



Pool Pro Online 3 is a pool simulator with a lot of polish, great 3-D graphics, and just the right amount of English. The gameplay is pretty intuitive, too: You can broadly aim your cue by swiping back and forth across the iPad's screen, or adjust its position more precisely by using a smaller, finesse-friendly bar below the pool table. And of course you can switch camera angles to get a better view before you make your play.

$2; Namco Networks America; macworld.com/6481

Armchair Quarterback

EA's **Madden NFL 11** for the iPhone continues the Madden franchise's tradition of excellent and realistic football. Though not packed with as many features as its console counterparts, Madden NFL 11 boasts better defensive-mode features and graphics compared with last year's mobile edition. Whether you're new to Madden or a longtime fan, you're bound to like the latest season of this football stalwart.

$5; Electronic Arts; macworld.com/6482

TRIPOD ADAPTER FOR iPhone

Capture sharp photos & smooth video from your **iPhone 3GS** or **iPhone 4**. The **Tripod Adapter for iPhone** works with most tripods and it's a perfect complement to the new FaceTime video chat and HD capture abilities from Apple.

GARY FONG

Scan this code with your smart phone or visit us online to learn more. www.garyfonginc.com/mw

Don't have a code reader? Get the free app at http://gettag.mobi

Macworld Superguides

Macworld's Superguide Series. These handy books are produced by the editors at *Macworld*. Packed with practical how-tos, the best tricks, in-depth features, troubleshooting advice, tips, and more.

macworld.com/superguide

Macworld Superguides are available in 3 convenient formats: 1) Downloadable PDF: Get immediate access. 2) Printed Book: Order a handy, full-color printed book on high-quality paper. 3) PDF on CD-ROM: Don't want to download the PDF, get it on CD-ROM.

STRATEGIC THINKING

Gamers don't live by brute force alone. Sometimes, it takes a little brain power to end up on top, and these mobile games will put you to the test.

—CHRIS HOLT

Order Up

In **Diner Dash: Grilling Green**, you fill the well-worn shoes of Flo, the harried, hard-working waitress who needs to keep her customers satisfied. While previous editions of the Diner Dash series required lots of mouse clicks, you only need a series of finger taps to control Flo on the iPad—a perfect fit for this sort of game.

$5; PlayFirst; macworld.com/6487

Take the A Train

A sequel to Train Conductor, **Train Conductor 2: USA** features brand-new areas modeled after four cities, plus the Grand Canyon. Colorful artwork is beautifully complemented by a catchy in-game soundtrack. You direct trains on parallel tracks to their properly numbered (or color-coded) stations in an intuitive, fun, and addictive game that will only improve with promised updates.

$1; The Voxel Agents; macworld.com/6485

Monster Mash

Monster Mayhem pits you against snarling, cartoonish monsters, balancing arcade action with a little strategic thinking in a tower defense game that offers many hours of challenging gameplay.

$2; Chillingo; macworld.com/6484

Land, Ho

LandFormer may not have breathtaking 3-D graphics. But this game, in which you raise and lower terrain to solve puzzles, combines a simple and intuitive set of rules with a nearly infinite set of playable scenarios, making for an addictive and highly entertaining gaming experience.

free; Streaming Colour Studios; macworld.com/6486

LIST No.7

CHANGING CONDITIONS

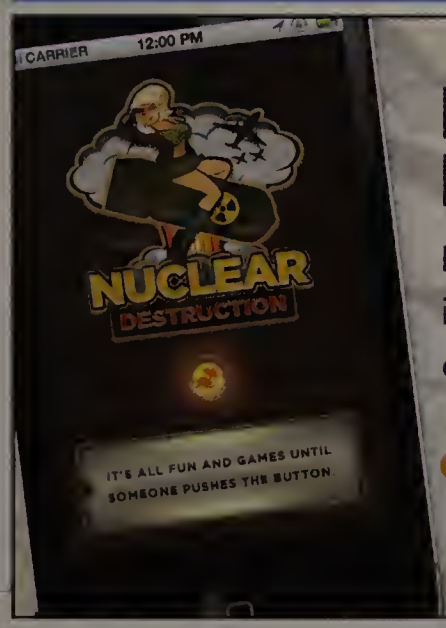
Stay on top of weather developments in your area (macworld.com/6506).

1. **Surf Report**
   free; Oakley
2. **iSki Trail Maps**
   $1; Clearlogic Mobile
3. **RadarScope**
   $10; Base Velocity
4. **The Weather Channel Max**
   $4; The Weather Channel Interactive
5. **Hurricane**
   $4; Kitty Code

Stress Hurts! Medications Working?

Stress Relief Find Out

www.psiappsinc.com



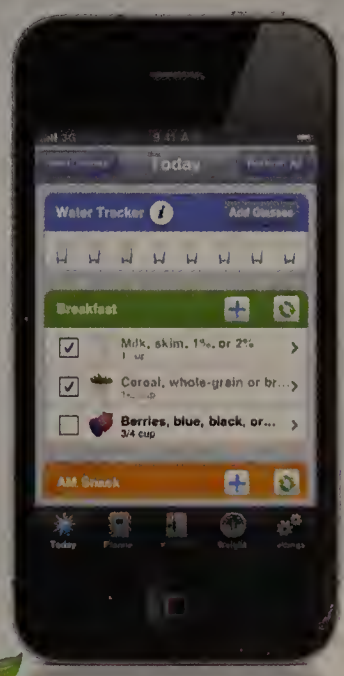
Play Nuclear Destruction!

Now for iPhone at the iTunes Store. iPad version coming soon!

CODE-MONKEYS
mobile • web • experts

www.code-monkeys.com

Premiering now at a special introductory price.



intelli-Diet
it thinks, you eat

NO CALORIE TRACKING • PERSONALIZED EATING PLANS AND GROCERY LISTS WITH THE FOODS YOU LIKE • EASY WEIGHT LOSS TRACKING WITH CHARTS AND TABLES...AND MUCH MORE!

Visit us at intelli-Diet.com to learn how we can help you achieve your weight-loss goals!

ACTION HEROES

Whether it's far-off battlefields, murderous aliens, or treacherous fruit, iPhone games pack enough punch for even the most demanding user.—CHRIS HOLT

Hunt or Be Hunted

Based on the film of the same name, **Predators**, by Chillingo, mixes over-the-top violence with well-rounded gameplay. Using a virtual joystick and two simple control buttons, you can perform gruesome finishing moves on your human foes.

$1; Chillingo; macworld.com/6490

The Thrill of Battle

With **Brothers in Arms 2: Global Front**, Gameloft adds to its impressive list of graphically superb iPhone games. In this WWII simulator, you use a virtual joystick and pop-up buttons to duck bullets, grenades, and metal fragments in fully immersive 3-D battlegrounds. To help you fight the enemy, the game takes advantage of the iPhone's touch capabilities, allowing you to simply aim at an enemy with your finger. Though most games of this nature have a boilerplate story, BA2 backs up its impressive gameplay with a solid, enjoyable story for you to follow.

$5; Gameloft; macworld.com/6488

Get Your Fill of Fruit

Halfbrick Studios' **Fruit Ninja** is a simple, slice-and-dice game. You are a ninja. Your mission: use your finger as a samurai sword to slice any piece of well-rendered 3D fruit that comes across your iPhone screen. But be quick about it, because the fruit will fall off the screen if you waste too much time before chopping it. The more fruit you chop, the more points you get. Though it may seem repetitive, the game's simple gameplay will have you coming back for more.

$1; Halfbrick Studio; macworld.com/6489

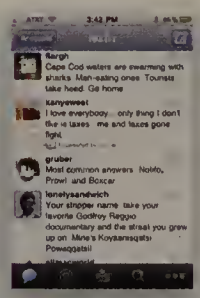
STAY SOCIAL

E-mail and instant messaging have become passé. This trio of iPhone apps keep you plugged in 24/7.—LEX FRIEDMAN

Stay Alert

As great as Twitter is, it doesn't tell you the moment you score new mentions or direct messages. That's a job for **Boxcar**, which integrates with scads of Twitter clients and sends you push notifications anytime someone tries to reach out to you on the site. Alerts arrive in less than a minute, adding more immediacy to your online social experience.

free; Appremix; macworld.com/5536



How Tweet It Is

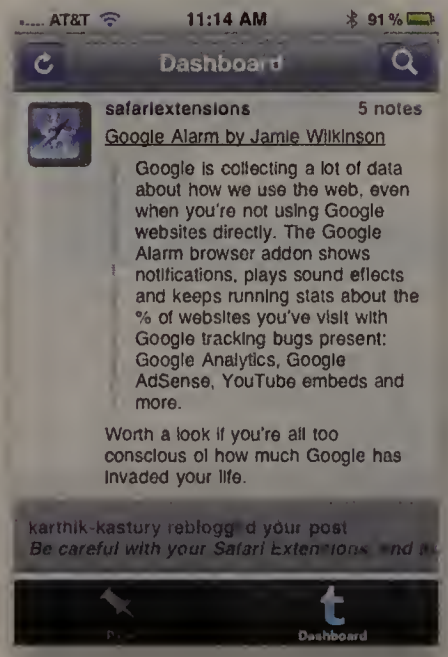
Twitter's free, official **Twitter** iPhone client is my favorite way to access the site. The app provides an appealing and intuitive means of browsing your Twitter timeline, with cleverly implemented gestures that feel like they should be built into iOS. Pull down on your timeline to refresh it, grabbing the newest updates. Swipe across an individual tweet to expose options for replying, retweeting, e-mailing, and such.

free; Twitter; macworld.com/5459

Time for Tumblr

Anything you can do from the Tumblr Website, you can do just as easily from within the free **Tumblr** app, which makes it easy to post to your blog whenever inspiration strikes. Impressively, the app lets you post any kind of content Tumblr supports—text, photos, videos, audio, quotes, links, and chat transcripts—and the custom interfaces for creating each kind of post look and work great. The iPhone app also provides access to your full Dashboard, where you can scroll through all of your friends' activity.

free; Tumblr; macworld.com/6470



LIST No.8

UP TO PAR

Can the iPhone improve your golf game? These apps can let you test that theory (macworld.com/6507).

1. **V1 Golf**
   $10; Interactive Frontiers
2. **Golfshot: Golf GPS**
   $30; Shotzoom Software
3. **iSwing: Golf**
   $3; Keuminotti
4. **Golf Channel Mobile**
   free; Golf Channel
5. **Tour Tempo Golf**
   $15; Tour Tempo

dexim™ *Put your dreams in life.* www.dexim.net

P-Flip™ Foldable Solar Power

for iPhone 4/3GS/3G

- Supply Extra 2000mAh Juice for your device
- Chargeable from the sun or wall or car charger(excluded)
- Synchronisation with your iPhone 4 /3GS/3G

15HRS Fully Charged from the SUN

UP TO **6HRS** TALK TIME/
10HRS VIDEO/GAME/**40HRS** MUSIC

CTIA Emerging Technology Awards

2000mAh Quick Charging

Fit for iPhone 4 with Original Bumper(Excluded)

DCA223

P-Flip™ Foldable Power Dock

for iPhone 4/3GS/3G

Latches onto your iPhone 4 with P-Flip

Enjoy your FaceTime HandsFree!

Fit for iPhone 4 with Original Bumper(Excluded)

2000mAh Quick Charging

INNOVATIONS 2010

- Supply Extra 2000mAh Juice for your device
- Charge and Sync your iPhone 4/3GS/3G
- Included TPU case and screen protector deliver all-around protection

UP TO **6HRS** TALK TIME/**10HRS** VIDEO/GAME/**40HRS** MUSIC

DPA065

For more information pls contact **sales@dexim.net** or visit **www.dexim.net**

dexim is a trademark of Santom Limited. iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.

*** Battery life will vary depending on model**

Made for iPhone

at&t

Brookstone

HKTDC2010 Hongkong	Oct 13th-16th Booth No. ICON-007
CES2011 USA	Jan 06th-09th 2011 Booth No. 4431
Macworld2011 USA	Jan 27th-29th 2011 Booth No. 642

JOB WELL DONE

While the iPad may not replace your laptop, these apps will make your tablet feel like a mobile office.

—JEFF MERRON

Strong Reader

GoodReader, a file-importing and -viewing app, works nicely on both the iPhone and the iPad. The app now enables you to import and view documents from Web-based file-sharing/backup sites such as Dropbox, Box.net, iDisk, and others. You can also import and view Google Docs files and Mail attachments, import files via Wi-Fi, transfer files from your Mac via USB, and download files from the Web. In addition to document viewing, GoodReader's file-management capabilities let you protect files, star them, mark them as read, create new files and folders, e-mail files, rename files, create links to files, and compress files and folders. The app also offers a feature called PDF Reflow, which can automatically extract text from PDF files and output a readable text file.

$1; Good.iWare; macworld.com/6136

Pages Turner

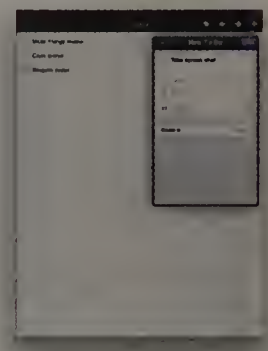
Apple ported its entire iWorks suite to the iPad, and each component—Numbers, Keynote, and Pages—can be a capable stand-in for its desktop counterpart. But the latter app in particular is a solid word processor for both basic and "stylish" documents, with 16 templates for résumés, invitations, and posters. While **Pages for the iPad** isn't quite a full-featured replacement for the Mac version, it's good enough to get real work done.

$10; Apple; macworld.com/6129

Good Things

On its most basic level, **Things** functions as a to-do list. But it is also a terrific tool for users who juggle multistep projects, offering multiple methods for managing tasks. It tends to default to the Getting Things Done methodology and terminology, but users who are unfamiliar with Getting Things Done can safely ignore those methods. Users of the Mac version of Things should be pleased with its flawless Wi-Fi syncing between the Mac and the iPad version.

$20; Cultured Code; macworld.com/6140



NEW VERSION. MORE IMMERSION.

SAVE 10% when you order today.

Level 1	Reg. ~~$249~~	NOW $224
Level 1, 2, & 3	Reg. ~~$579~~	NOW $521
Level 1, 2, 3, 4, & 5	Reg. ~~$749~~	NOW $674

SIX MONTH, NO-RISK, MONEY-BACK GUARANTEE*

Buy Rosetta Stone today:
(888) 232-4889 RosettaStone.com/ozs110
Use promo code ozs110 when ordering.

Our Proven Solution. Enriched.

Discover Rosetta Stone's award-winning solution, now with an entirely new online experience that fully immerses you in language as never before.

- Learn naturally using our unique software, complete with proprietary speech-recognition technology.
- Converse confidently through live practice sessions tutored by native speakers.
- Communicate and connect with others as you play games in our exclusive online community.

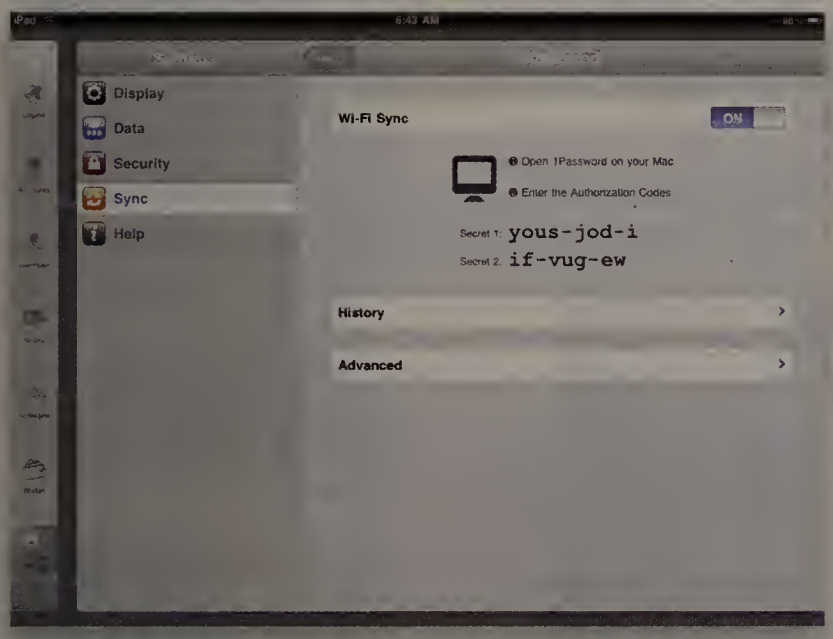
RosettaStone

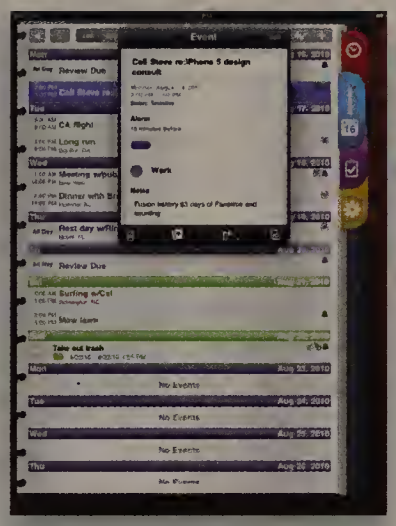
©2010 Rosetta Stone Ltd. All rights reserved. Offer limited to Rosetta Stone Version 4 TOTALe™ products purchased directly from Rosetta Stone, and cannot be combined with any other offer. Prices subject to change without notice. Offer expires February 28, 2011.
*Guarantee is limited to Version 4 product purchases made directly from Rosetta Stone and does not include return shipping. All materials included with the product at time of purchase must be returned together and undamaged to be eligible for any exchange or refund.

Password Protector

If you've got information that's sensitive but hard to remember, **1Password** is your solution. Like its Mac counterpart, you can store just about anything in 1Password's password-protected vault—including login names and passwords, credit card account information, software registration codes, and free-form notes. You can't integrate 1Password into your iPad browser like you can on a Mac, but this version includes an integrated browser from which you can access sites and autofill information.

$10; Agile Web Solutions; macworld.com/6145





Day by Day

Though it may be a calendar app, **Pocket Informant HD** also boasts Getting Things Done time- and task-management capabilities. This iPad offering provides endless options for categorizing tasks and events. But what makes Pocket Informant HD a winner is that it enables you to choose between multiple task-management methods, giving you the flexibility you need to manage your calendar.

$7; Web Information Solutions; macworld.com/6492

LIST No.9

SLEEP SOUNDLY

Use your mobile device to make sure you get a restful night's sleep and to wake up on time in the morning (macworld.com/6508).

1. **Pzizz Sleep**
   $3; Pzizz Technology
2. **Snoring U**
   $2; Pointer Software Systems
3. **Ambiance**
   $3; Urban Apps
4. **aSleep HD**
   $2; Signs Studios
5. **Best Alarm Clock + Weather and Temperature**
   $1; MyNewApps.com

Your iPhone/iPad Idea* to Fruition in 2 Steps

1 Bring your application idea to Zco

2 Zco *designs* and *develops* your app

Stumped by this puzzle? The answer is on our website

We do windows too. 20+ years of industrial strength applications using .Net, Java & PHP.

* Bring your Android, Blackberry, Windows Phone, WebOS & Symbian ideas too.
As one of the largest mobile developers in the world, we support all major platforms.

Look for these apps in the App Store

NameCatcher	Abbo EMR*	Postcard Star	eRoentgen	A1 Ring Toss	StoryPages	Brag Book	iPlaylist Creator
Lifestyle	Medical	Travel	Medical	Games	Productivity	Productivity	Music

Crafted by Zco

20+ Years of High Quality Service

www.zco.com 603.881.9200

ZcoCorporation

*Available Q3, 2010

MOBILE BRAIN BUILDERS

Your iPhone or iPad can be a great tool for keeping your children entertained during interminable car rides and lengthy waits in line. But if your kids aren't careful, the devices might also succeed in teaching them a thing or two.

—ROMAN LOYOLA

Toying with Physics

Try to explain physics to a child, and you'll probably be met with a glassy-eyed stare. **Toy Physics** helps kids understand—and maybe even appreciate—this scientific discipline through gameplay. Toy Physics features falling toys that you have to put into a crate by drawing platforms with your finger. The shape and weight of each toy affects the way it falls. You'll also need to contend with obstacles that get in the way. It's an addictive game that requires quick thinking and a critical eye, and three difficulty settings keep the game's 40 levels fresh and challenging.

$1; Athos; macworld.com/6494

Brain Games

Kids like to feel empowered, and **Brain Quest: Blast Off** is excellent at doing just that. Available as a series of apps for kids grades 2 through 7, Brain Quest asks questions about a variety of subjects based on grade level. Subjects include math, social studies, science, and language arts. The questions Brain Quest poses are challenging but not too difficult. Kids can earn digital trophies for successfully completing different levels, providing a rewarding sense of accomplishment (not to mention a virtual trophy case for your kids to admire). Brain Quest has a lot of questions to keep your kids coming back for more.

$3; Modality; macworld.com/5326

LIST No. 10

SUBSTITUTE APPLE'S APPS

Your iPhone comes with a number of built-in apps. But if you'd prefer something else, plenty of other App Store choices can do the same job (macworld.com/6509).

1. **Atomic Web Browser**
   $1; RichTech
2. **Dragon Search**
   free; Nuance Communications
3. **PCalc RPN Calculator**
   $10; TLA Systems
4. **Recorder**
   $1; Retronyms
5. **WeatherBug Elite**
   $1; WeatherBug

Doodle Away

When it comes to drawing apps for kids, **Doodle Buddy for iPad** offers an approachable interface and a few advanced tools for when your budding Picasso is ready to use them. Kids can paint with four fingers at a time, draw on an included template, draw on a photo in your library, and more. The iPad version offers more drawing tools than its iPhone counterpart (though that version has a cooperative mode where two iPhone users can work on the same drawing from separate phones).

free; Pinger; macworld.com/6493

LIST No. 11

DRIVEN

Want to be a highway star? Load these apps before you load your car (macworld.com/6501)

1. **AccuFuel**
   $1; Appigo
2. **AAA Roadside**
   free; AAA
3. **Roadside America**
   $3; This Exit
4. **RouteBuddy Atlas**
   free; RouteBuddy
5. **Trapster**
   free; Trapster.com

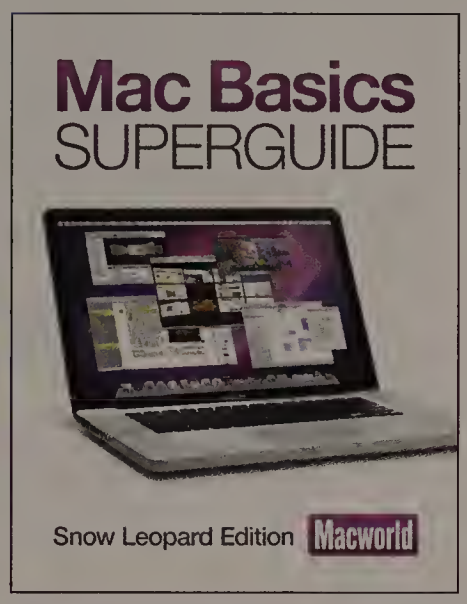
Spider, Man

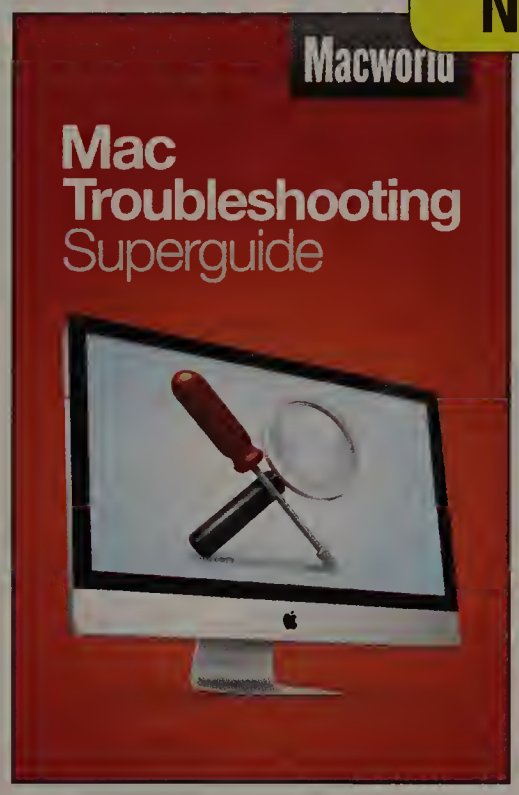
Itsy Bitsy Spider HD wrings more entertainment out of that familiar childhood song about spiders, spouts, and unexpected rainstorms than you can possibly imagine. Tap on just about anything in the colorful outdoor scene, and something happens—windows slide open, animals jump out, and more. Often, tapping on the same object multiple times triggers a new action. Young children will love discovering all the actions that they can trigger simply by tapping the screen in this cute, well-designed app.

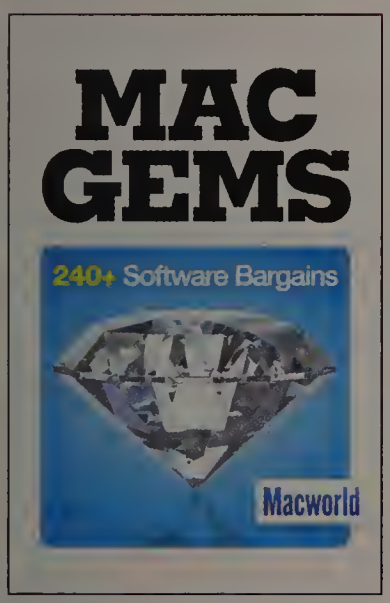
$2; Duck Duck Moose; macworld.com/6571

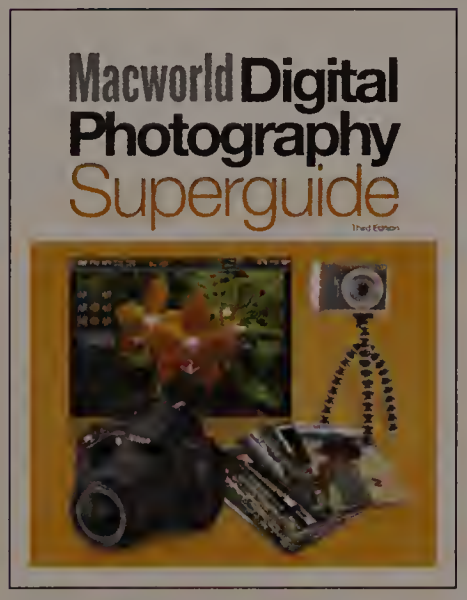
Macworld Superguides

NEW!









Macworld's Superguide Series

These handy books are produced by the editors at *Macworld*. Packed with practical how-tos, the best tricks, in-depth features, troubleshooting advice, tips, and more.

Macworld Superguides are available in 3 convenient formats: 1) Downloadable PDF: Get immediate access. 2) Printed Book: Order a handy, full-color printed book on high-quality paper. 3) PDF on CD-ROM: Don't want to download the PDF, get it on CD-ROM.

ORDER NOW!

www.macworld.com/superguide

FIRST LOOK

Microsoft Office 2011

What you need to know about the office suite update

This fall, Microsoft will release a new edition of its venerable productivity suite: Office for Mac 2011. This time around, the suite will include updated versions of Word, Excel, PowerPoint, and Messenger, along with a new version of Outlook (replacing Entourage as the e-mail/calendaring app).

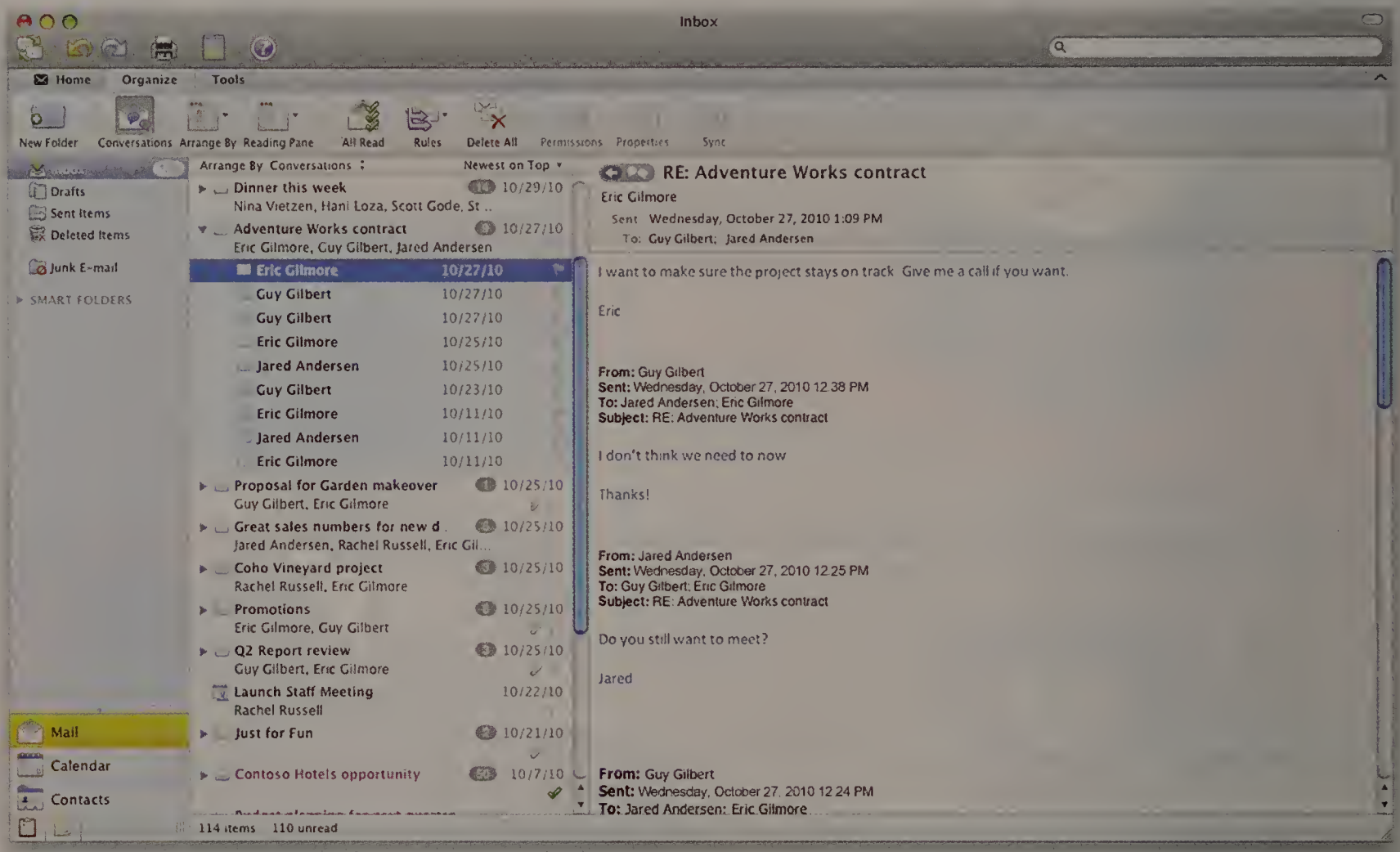
This release arrives three years after the company's last Mac suite, Office 2008, and one year after Office 2010 for Windows. That timing is significant: Some of the changes in the new suite—including the replacement of Entourage with Outlook as the suite's e-mail/calendaring component and the return of Visual Basic for Applications—clearly required some serious development time. Others—including the new Ribbon and coauthoring tools—were built to make the Mac suite as similar to, and as compatible with, the most recent Windows version as possible.

We plan to have reviews of Office 2011's individual applications—Word, Excel, PowerPoint, Outlook, and Messenger—in next month's issue; by then, we'll have had time to evaluate the final, shipping code. In the meantime, here's a preview of some of the suite's most important new features, based on our look at prerelease software.

BY DAN MILLER

Illustrations by Neil Webb

W
X



OUTLOOK *Say good-bye to Entourage*

Perhaps the biggest change in Office 2011 is that Entourage is out as the suite's e-mail, calendar, address book, and to-do list component, and Outlook is in. Or, rather, Outlook is back: A decade ago, Microsoft offered Outlook as an Exchange client for the Mac; the last version of that program was Outlook 2001. It was replaced by Entourage, which has been included in every version of the Office suite since.

From all appearances, Outlook 2011 is more than a renamed Entourage. Microsoft says that it was built almost entirely using Apple's modern Cocoa frameworks; previous Office apps relied on Carbon. For many of us, Entourage never lost its slightly alien look and feel; Outlook should seem much more Mac-like.

Outlook also does away with one of Entourage's most vexing problems: Entourage stored all of your messages, appointments, and contacts in one huge database file. One really unfortunate result of that: You couldn't use Time Machine conveniently to back up your Entourage data, because it would recopy the entire database any time you made even the smallest change. Outlook 2011 will, instead, store your data as smaller, text-based files. That will make it easier to back up the data via Time Machine; it should also make Outlook much more searchable in Spotlight.

Outlook's interface is cleaner and more efficient than Entourage's, too. For example, by default e-mail messages are presented in Conversation view—meaning that all the messages in a given thread appear together, no matter which folder they're in. (You can, of course, always resort to the old unthreaded view if you wish.)

In keeping with the learning-from-Windows theme, Outlook 2011 has acquired several features pioneered Over There. For example, Outlook enables what Microsoft calls "rich editing," meaning you can format messages with strikethroughs, highlighting, subscripts, and other text effects. Eventually, Microsoft says, you'll also be able to create and edit tables from within Outlook. But that will have to wait for a service pack; in the initial release, you'll only be able to view tables created by Windows users and forward messages containing such tables without their getting corrupted or reformatted.

The new Outlook's other features let you manage multiple calendars, so you can organize schedules for coworkers or keep your work appointments separate from your personal dates; view the first page of Word attachments without your having to launch Word; filter messages by categories (Family, Work, and so on); and subscribe to team calendars stored by SharePoint.

THE RIBBON *Easier access to tools*

The Elements Gallery was one of the most highly touted additions to Office 2008. It was also one of the most controversial.

It was essentially a huge toolbar that ran across the top of document windows in Word, Excel, and PowerPoint. The idea was to make those programs' many tools—which were previously buried many submenus deep—more "discoverable." The Elements Gallery also let you do without those floating palettes, which were so easy to lose amid your other windows. Unfortunately, many users never needed those tools. Yet it was almost impossible to make the Elements Gallery go away.

Office 2011 introduces an improved variation on that same theme: the Ribbon. Originally developed for Office 2010 for Windows, the Ribbon also brings a ton of tools closer to the surface. In Word 2011, for example, the Ribbon appears as a thin strip of tabs—Home, Layout, Document Elements, and more; click on a tab, and the corresponding toolbar appears. Click on the Layout tab, for example, and the toolbar that appears lets you control page setup (orientation, size, and breaks), margins, text-direction, columns, line numbering, hyphenation, watermarks, and more.

HOME RIBBON The Ribbon makes commonly used tools more accessible, so you don't have to dig through menus to find them.

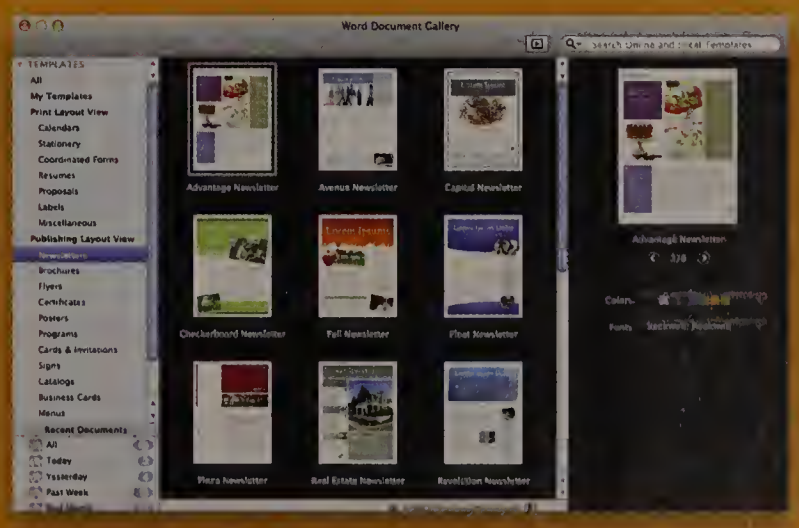
The big difference compared with the Elements Gallery in Office 2008 is that you can completely turn off the Ribbon if you want (Preferences ▸ Ribbon). And, unlike the Windows version of the Ribbon, the Mac's doesn't replace traditional menus or toolbars; those are still available if you would rather use them.

TEMPLATES *In living color*

Office has offered templates—those prepackaged, preformatted blank documents into which you could pour your content—since forever. The way the suite has presented those templates, however, has never been particularly elegant: When you opened Word, for example, or selected File ▸ Project Gallery in Excel, you would see a gray box filled with drab, low-resolution thumbnails.

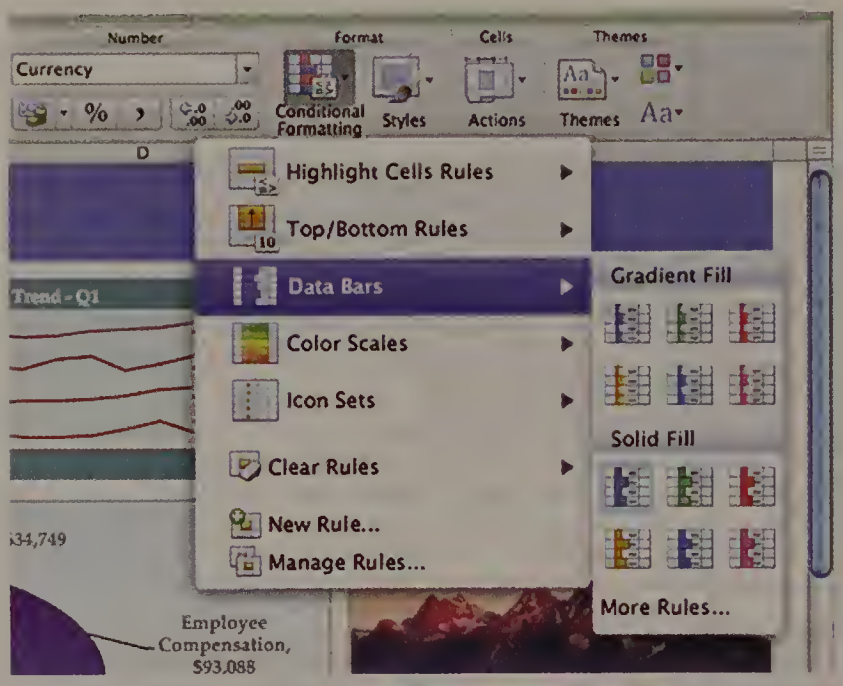
In Office 2011, that box has received a major makeover. It now displays rich, high-definition previews of templates. You can mouse over one of the thumbnails to see a multipage preview. You can also customize the template's color scheme and font; in PowerPoint, you can set the orientation (landscape or portrait).

The template gallery also includes a link to Microsoft's online template library. There, you'll find tens of thousands of additional templates, from professional designers as well as regular Office users, organized by categories and fully searchable.



BETTER PRESENTATION Office 2011's template galleries are now full-color and interactive.

The Gallery retains one of its niftiest features: a Recent section, which collects the files you've worked on recently into chronological groups (Today, Yesterday, and so on).



WORKS BOTH WAYS Conditional formatting that you apply in Excel for the Mac will also work in Excel for Windows.

COMPATIBILITY

Work with Windows

One of Microsoft's big themes in promoting Office 2011 will be compatibility—specifically, compatibility between the Mac and Windows versions of the suite. Compatibility comes in three areas.

First, there's cross-platform compatibility. The idea is that you should be able to create a document in Word 2011, a spreadsheet in Excel 2011, or a presentation in PowerPoint 2011 on your Mac and send it to a colleague who uses Office 2010 on a Windows PC. The recipient should be able to open the document with all of its functionality (including Visual Basic macros) intact.

The second area of compatibility concerns output. To test this, developers in Microsoft's Mac business unit would print the same document from Office 2010 on Windows and Office 2011 on a Mac, and then hold both documents up to the light. If they saw any difference at all, that was a bug they had to fix.

Third, there's feature compatibility. Microsoft says that it wanted to make sure Mac users who stumbled across the Windows version wouldn't say, "Hey, why don't we get that feature?" Hence the return of Outlook, the reintroduction of Visual Basic, and a bunch of other smaller additions to the Mac suite.

The feature compatibility reaches deep. Take, for example, proofing tools. Microsoft has updated all of them in Office 2011 to use the same APIs as Office 2010, so vendors of third-party tools that rely on the Windows proofing APIs can port their tools to the Mac; Microsoft itself has already done so, converting tools built for the Windows suite to the Mac version.

COLLABORATION

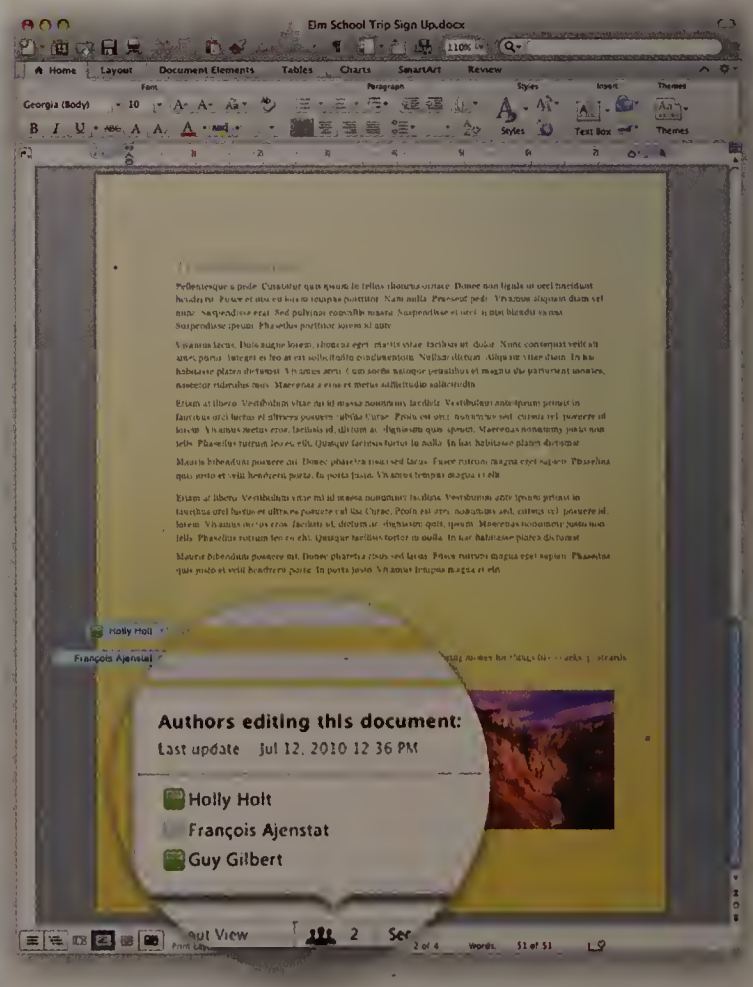
Multiple authors

Collaboration is the other big theme Microsoft is touting (along with compatibility): With Office 2011, multiple users can work on a single document at the same time, regardless of their locations or the kinds of computers—Mac or Windows—they're using.

Office 2011 is integrated with Microsoft's SkyDrive and SharePoint file-storage services. (SkyDrive is for regular consumers; SharePoint is for the corporate market.) A menu item—File ▶ Share—lets you save documents directly to either one. You can then share the document's URL with collaborators; they can open the shared document in Office 2011, Office 2010, or one of the Office Web apps.

Collaborators can all edit the same document simultaneously. You can see when updates occur, and be notified of who else is working on the document. You can also block out sections of the document, to prevent others from making changes there, and resolve conflicting changes.

The only catch: All of the collaborators must be using Microsoft Messenger and Outlook to take full advantage of this collaboration infrastructure. If you're already using other communications apps, will you want to switch?



WHO'S THERE? When you're collaborating in Office 2011, a pop-up tells you who else is working on the document.

RIVE CREATIVITY

MAGINATION WITHOUT LIMITATIONS

G|DRIVE PROFESSIONAL STRENGTH EXTERNAL HARD DRIVES | G-TECHNOLOGY.COM/MACWORLD

D SIG **D** FOR MACS | HITACHI HARD DISK | SILENT COOLING SYSTEM | QUAD CONNECTIVITY | 3 YEAR FACTORY WARRANTY

MACWORLD READERS **GET 10% OFF**

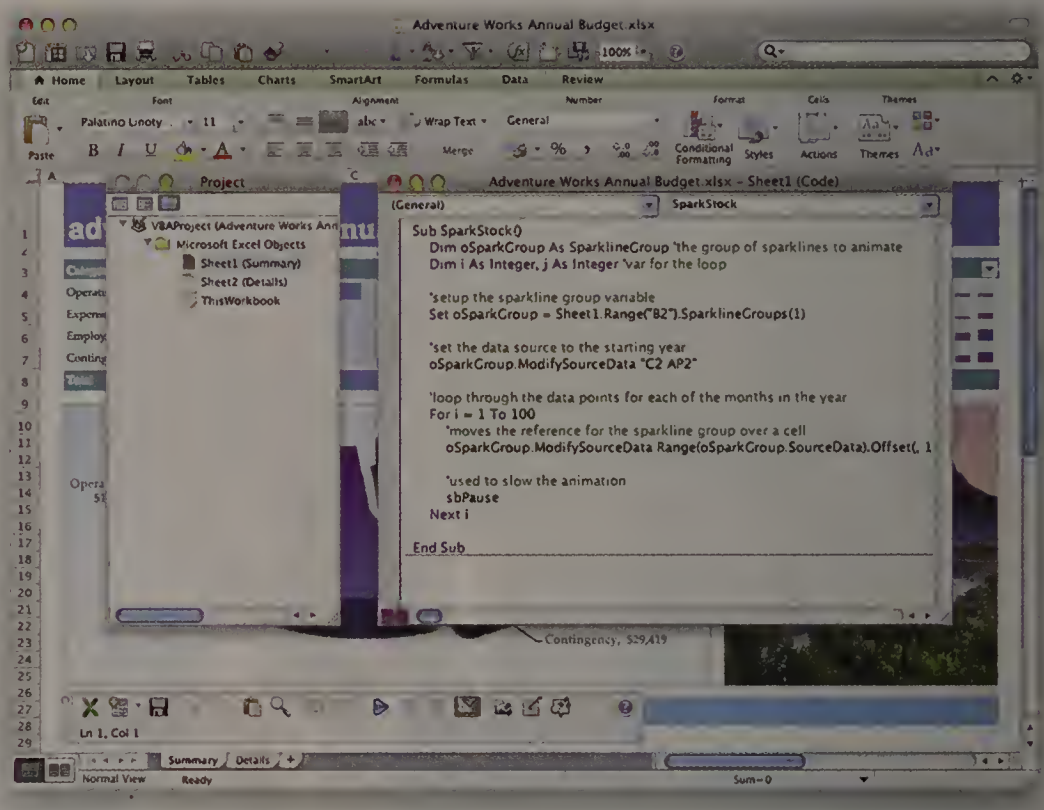
G-Technology
By Hitachi

VISUAL BASIC *Macros return*

When Office 2008 was released, there was much teeth gnashing and hair rending, because Microsoft had removed Visual Basic for Applications (VBA). Not everybody used the scripting language, but for those who did, the loss of VBA was enough to convince many of them not to upgrade at all. That's why the announcement that VBA is returning in Office 2011 is, for some users, the biggest and best news about the new suite.

And this isn't just any old version of VBA. Office 2011 comes with the latest version (VBA 6.5), ported from Office for Windows. That means that macros you build in one version of the suite should work just fine in the other. It also means that Office 2011's VBA has all the latest tools, including Microsoft's IntelliSense autocompletion, which provides type-ahead cues for properly formatting your code.

Some Office users switched to AppleScript for some of their automation needs, but it left many users dissatisfied. AppleScript couldn't do several things VBA could, including recording and embedding macros, customizing the Office interface, and making automated documents compatible across platforms.



AUTHORING MACROS With the return of Visual Basic for Applications, you can once again add automated and interactive features to Office documents.

(VBA was removed in the first place because it was designed for the PowerPC processor. When Apple switched to Intel chips, VBA no longer worked. It took Microsoft a while to rewrite the code.)

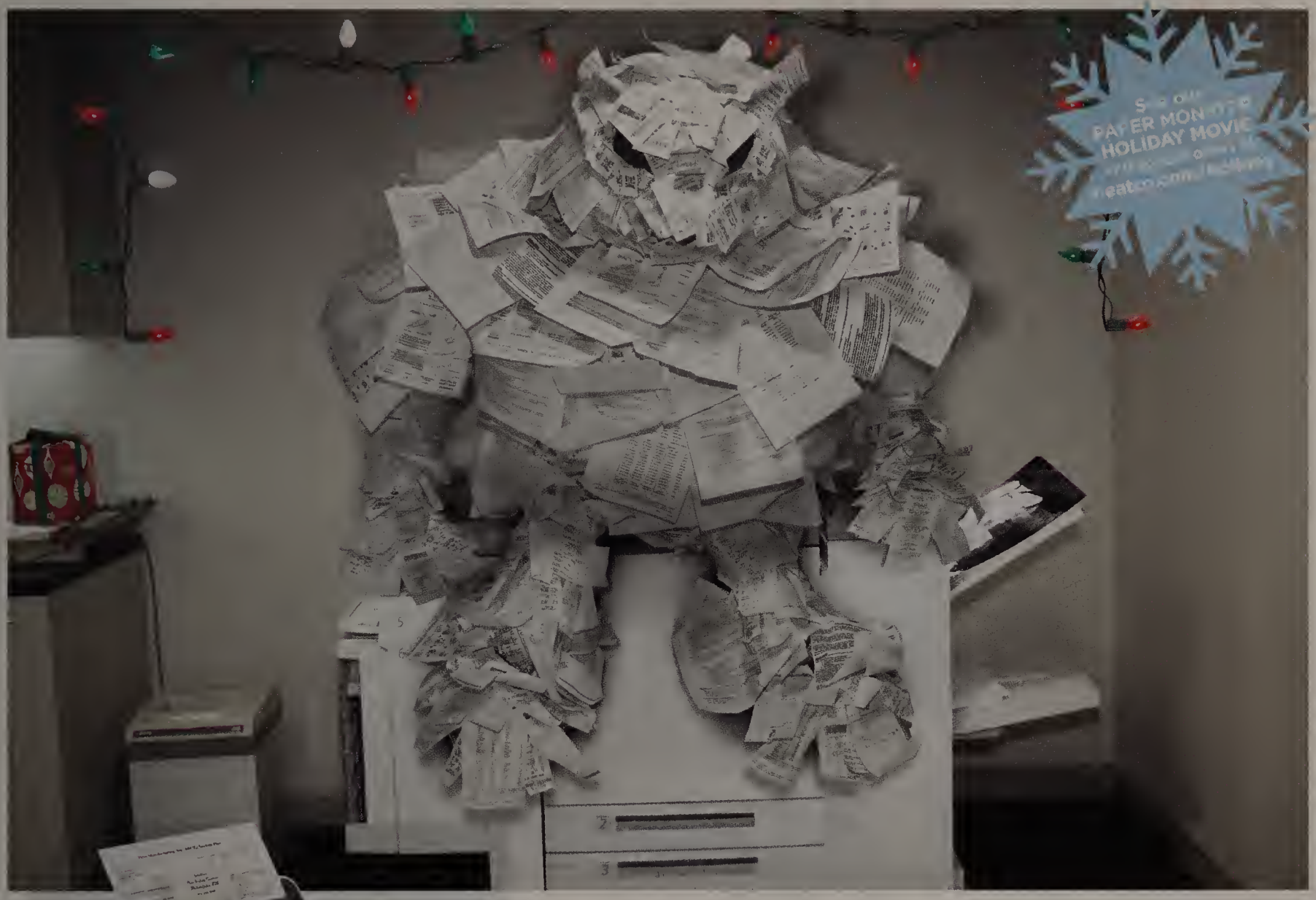
INFORMATION RIGHTS MANAGEMENT

Retain control

Corporate users will cheer the addition of Information Rights Management (IRM), a Microsoft technology that allows you to set access rights for specific documents or messages. It's been available on the Windows side before (since Office 2003), and it's a regulatory requirement in some industries; for both reasons, it should make Macs that much more welcome in the enterprise.

With IRM, you'll be able to control what recipients do with your Word documents, Excel spreadsheets, PowerPoint presentations, and Outlook e-mail messages. You can, for example, prevent unauthorized users from opening them at all. You can prevent authorized users from editing, printing, or forwarding your content.

There are a ton of restrictions on Office 2011's implementation of IRM. Foremost among them: It won't be available in the consumer versions of the suite; it will work only in special editions available to corporate customers. Additionally, it requires a special, Windows-based server infrastructure to manage permissions.



Will your office be naughty or neat for the holidays?

Paper Monsters love the holidays. Year-end expense reports, gift receipts—even cookie recipes—can quickly grow to beastly proportions. But Neat helps you stay merry and clutter-free at work, at home, or on the go. Whether it's the portable NeatReceipts® or the lightning-fast NeatDesk®, our patented software extracts key details from your paper and organizes it all in a digital filing cabinet. Good for productivity. Great for gift giving. Bad for Paper Monsters.

- **Scan** and organize receipts, business cards and documents in a digital filing cabinet
- **Create** expense reports, tax reports, digital contacts and searchable PDF files
- **Export** data to Address Book, Excel,® and Quicken®

NeatDesk® FOR MAC

DESKTOP SCANNER + DIGITAL FILING SYSTEM

Mac

With this high-speed scanner, you can scan receipts, business cards, full-size documents, or insert up to 50 pages at once for lightning-fast batch scanning.

NeatReceipts FOR MAC

MOBILE SCANNER + DIGITAL FILING SYSTEM

Mac

At less than one pound, the USB-powered scanner fits easily in your laptop bag and is perfect for the road, home, or office.

FREE SHIPPING WITH PURCHASE

USE PROMO CODE: MWFREE

TO ORDER VISIT
neatco.com/MWFREE
OR CALL 866-395-8717

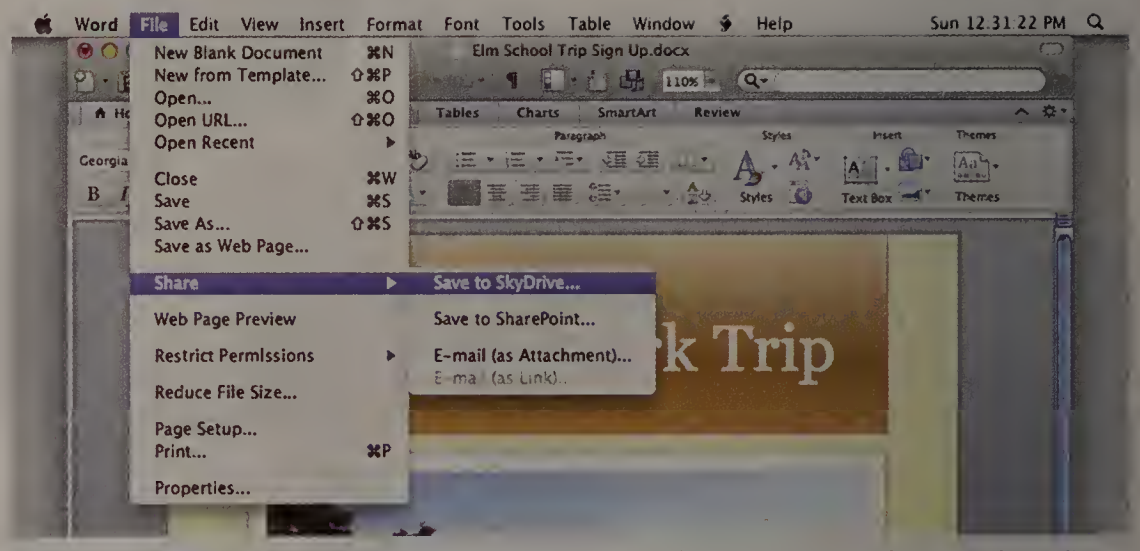
neat

WEB APPS *A threat to Google?*

In addition to being able to save documents to the cloud (using SkyDrive—see "Collaboration"), you can also create files there: Microsoft's recently released Office Web Apps offer online versions of Word, Excel, and PowerPoint. While those apps have been available since last June, Office 2011 makes them much more valuable to Mac users.

That's because those Web apps store documents on Microsoft's SkyDrive (the same cloud-storage service Office 2011 uses for collaborative documents). That means you can edit documents you've created in Office 2011 from anywhere you can use a browser.

To use SkyDrive, you have set up a Windows Live ID (if you haven't already). That done, you click on the Office link from the Windows Live home page. From there, you can create new documents using the online apps, open documents you already created in Office 2011, or share documents with collaborators. You can also select a document stored on SkyDrive and open it in the corresponding Office 2011 app.



SAVE TO THE CLOUD By saving a Word document to SkyDrive, you can then use the online version of the desktop app to edit it from anywhere.

Microsoft's Web apps look and feel like "real" desktop programs; their interface is similar, if not exactly the same. That gives them a more polished feel, which could give them an edge over other online productivity tools (including Google Docs).

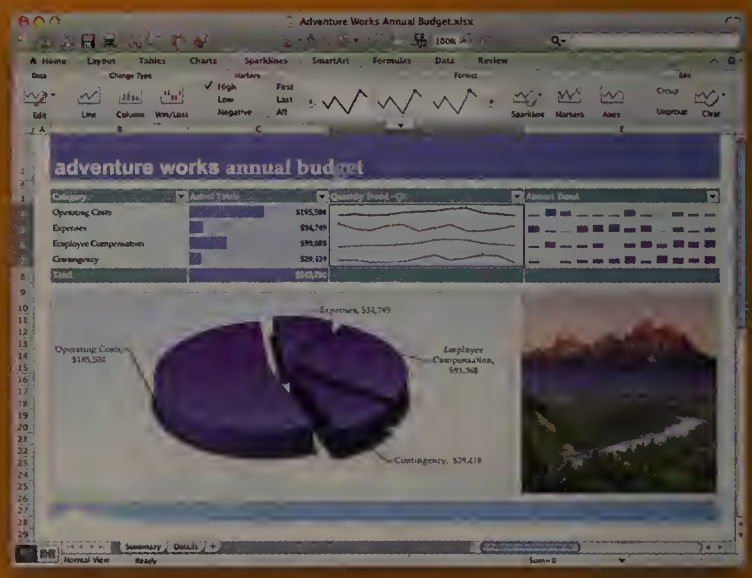
EXCEL *Sparklines and more*

Excel gains a couple of new features, many of which make it more compatible with the Windows version.

The first is something Microsoft calls *sparklines*. They're essentially tiny charts (bar, line, or column) that fit within single cells. You could insert one next to a row of numbers, for example, to illustrate them visually.

Microsoft has also updated PivotTables (which quickly and intelligently reorder and summarize worksheet data). While Excel has had PivotTables for a long time, Excel 2011's implementation is more compatible with Windows; worksheets containing PivotTables no longer crash when they are opened in Windows Excel 2010, and vice versa.

Excel 2011 also gets a revamped version of conditional formatting (this lets you define the style of a cell based on its contents). Although Excel for the Mac has had such formatting, its implementation is now compatible with Excel for Windows. So if you were to send a spreadsheet created on a Mac to a Windows user, your conditional formats would still work. Excel for the Mac also inherits a bunch of conditional formatting tools from the Windows version—including prepackaged criteria such as Top 10, Bottom 10%, and so on—from the Windows side.



MINI CHARTS Sparklines (near the center of the screen) are little charts you can embed in single cells.

WORLD'S THINNEST
PORTABLE LAPTOP STAND

12 Degree Ergo Benefit
Provides an optimal ergo angle that reduces strain on your wrists.

Airflow
Raising the laptop two inches off your work surface allows for better airflow, enabling the laptop to run cooler and more efficiently.

Ultra Thin and Lightweight
Measuring in at 1mm thin when open and 5mm thin when folded, this portable laptop stand weighs a mere 5.5 ounces.

Hylite® Material
This German-made, patented aluminum material provides a flexible lightweight solution that is extremely durable.

www.AViiQ.com

2010 INNOVATIONS INTERNATIONAL CES

AViiQ On the Go.

POWERPOINT *Easier layering*

PowerPoint also gets a bunch of tweaks in Office 2011.

One of the most interesting is dynamic reordering. Both Word and PowerPoint let you build complex documents and slides by layering elements together—graphics, text, shapes, charts, and so on. The trouble is, the more you pile on the page, the harder it can be to manage the mess. With dynamic reordering, you can now switch into a "layer control mode," which lets you see your document from the side. This makes it easier to see all the layers, which you can then reorder by dragging each from one spot to another.

PowerPoint has also acquired the ability to broadcast presentations directly from within the app, without using an online conferencing service like WebEx or GoToMeeting. This does require a Windows Live ID or a corporate SharePoint system.

Also new is a tool for comparing presentations; there isn't a track changes tool, but the comparison tool could help accomplish the same thing.

Finally, you can now add narration to your presentations: You can record a voice-over and then save the presentation as a movie for uploading.

DYNAMIC REORDERING Rearranging layered elements on a slide in PowerPoint is easier.

WHAT'S MISSING

Despite all the new stuff, Office 2011 is missing a few features. Among the most notable:

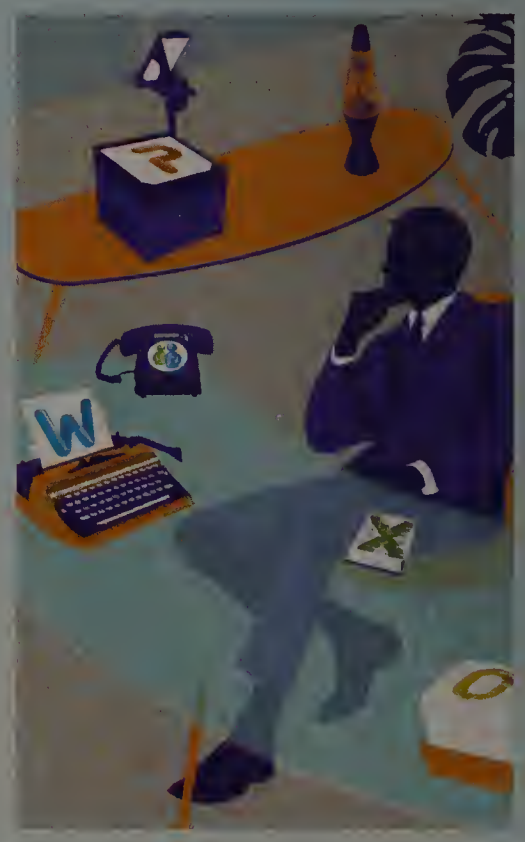
> Office 2008 had its own, dedicated Help Viewer. In Office 2011, all "local" help information will be displayed in OS X's native Help Viewer; online help will appear in a browser.

> PowerPoint loses both its File ▶ Send To ▶ Microsoft Word and its File ▶ Save As Web Page options. It also loses its org chart option (in the Smart Art gallery), and the grayscale mode (View ▶ Grayscale).

> Excel's built-in calculator is gone, as is the spreadsheet app's condition sum wizard and ledger sheets.

> In the migration from Entourage to Outlook, we lose the project center, access to Internet newsgroups, the mailing list manager, and the ability to build travel time into appointments.

> Last but not least: Office 2011's code will be 32 bit only, not 64 bit. The reason is that, while Microsoft has tried to build as much of the suite as possible using Apple's Cocoa frameworks, it wasn't able to do so entirely. And the remnants of non-Cocoa code mean the suite as a whole must run in 32-bit mode. Microsoft says that most users will notice no speed difference; only power users whose spreadsheets contain millions of cells and complex customizations might see a performance lag.



Bowers & Wilkins

Small sounds beautiful

Zeppelin Mini Introducing Zeppelin Mini, the latest iPod speaker from Bowers & Wilkins. It gives you everything you love about the original, award-winning Zeppelin™ – incredible sound, intelligent design, elegant connectivity – in a compact package that's perfect for desktops and bedside tables. Because even when your space is limited, it doesn't mean your sound has to be.

www.bowers-wilkins.com/zeppelinmini

Available at Apple stores and apple.com

The iPad Goes to Work

Small companies and entrepreneurs are finding innovative ways to use Apple's tablet

BY JOEL MATHIS

When Steve Jobs unveiled the iPad in January, he pitched it mostly as a consumer device—a relaxation tool people would use to read books, play games, watch video, and peruse family photos. But Michael Kanzleiter and his colleagues at Mercedes-Benz Financial saw something else: a better way to sell cars.

Traditionally, car salespeople trying to close a deal have had to drag customers off the showroom floor and back to the office to fill out loan applications and other paperwork. This summer, though, iPads were distributed to 40 Mercedes-Benz dealerships throughout the country, letting dealers complete forms right next to the new cars—and, perhaps, minimizing the chances that customers would get cold feet during the final moments of the purchase process.

"The car is where the emotions come up, and the customer is excited about it," Kanzleiter, senior marketing manager for Mercedes-Benz Financial in Farmington Hills, Michigan, says of the pilot program. "The more you can have the process close to the car, the better it is."

Mercedes-Benz isn't alone in bringing the iPad into its business processes. During Apple's third-quarter earnings report, COO Tim Cook said that 50 percent of Fortune 100 companies are now using the device. But it's also clear that small businesses and entrepreneurs are finding innovative ways of using the Apple tablet to make their businesses and professional lives run more smoothly and profitably.

"It's certainly true that we could do everything on a laptop or iPhone, but it wouldn't be quite as elegant."

Examples from the Field

Here are a few examples of how businesspeople are putting the iPad to work:

Paperless Sales C. Lee Smith, president and CEO of Sales Development Services in Westerville, Ohio, sends his sales staff into the field with AdMall (www.admall.com), a Web-based diagnostic tool that lets them survey clients about their local advertising needs and helps them create a business plan on the fly.

"The beauty of the iPad is that you skip a step in the process—you don't need paper, you don't need to go back and key it in," he says. "You can just tap and get the correct answers."

Furniture Delivery Cleveland-based Arhaus Furniture (www.arhaus.com) will put iPads in the hands of its furniture delivery staff in 14 states by November—and expects to save $100,000 a year in time and paper costs for its invoicing, signature-capture, and credit-approval processes. The deliverers will also be able to use the GoogleMaps app to make sure they're delivering the furniture to the correct location.

"We looked at the traditional [electronic invoice] systems that were out there. For big, burly guys who

ILLUSTRATION BY KATE VANDENBERGHE

deliver furniture, they were kind of tiny. The iPad was just right," says John Roddy, Arhaus's senior vice president of logistics. "They're excited about it, and a little hesitant. When they start looking at less paper carried around, the ability to help the customer in the home, it makes it exciting."

Real-Time Stats Charlie Wood, a founder of Spanning Sync (www.spanningsync.com) in Austin, Texas, has his personal iPad propped up next to his office desktop computer. It's open all day to a password-protected Web page that updates constantly with real-time information about sales, server use, and other critical information for the company, which sells apps that sync Google calendars and address books with a user's hard-drive information.

"We're sort of addicted to numbers. We're addicted to metrics," Wood says. "What we really wanted was something ambient—instead of looking it up, it would be a thing on the wall. You could glance over and know what the numbers are without looking them up."

All-Purpose Assistant In the United Kingdom, James Burland of Anglebury Press (www.angleburypress.co.uk), a small printing company on the south coast of England, uses the iPad to do everything from entering job details on Google Docs forms, to taking phone messages, to showing artwork to clients before jobs go to press.

"It's certainly true that we could do everything on a laptop or iPhone, but it wouldn't be quite as elegant," says Burland, who also writes the iPad Creative blog (www.ipadcreative.com). "The iPad gets carried around quite a bit from office to office and even around the factory."

Technical Manuals to Go In Warsaw, Poland, broadcast engineer Wojtek Pietrusiewicz uses an iPad instead of carrying a library of technical manuals with him as he services equipment.

"Whenever I do maintenance, software/hardware upgrades, or full installations, I require many manuals in PDF form. Since there is rarely space for a laptop in the central apparatus rooms, I decided to use my private iPad instead," he says.

Point of Sale Mercedes-Benz has distributed iPads to selected dealerships across the country. The company hopes buyers will be less likely to get cold feet if they can complete forms in sight of the car they want.

PDF Review Tool Back in the United States, Wharton School Publishing (www.whartonsp.com) editor Stephen J. Kobrin says that the iPad has proven more useful than the Amazon Kindle DX at displaying PDFs—allowing him to reduce paper clutter—and more versatile than Microsoft's line of tablets.

"It's primarily useful for reading documents and keeping everything in one place," Kobrin says. "It's also very good for keeping to-do lists."

Size Matters

One common thread becomes clear when talking to people who use the iPad at work. Laptop computers are often too bulky to be practical for use in the field, while iPhones and other mobile devices are too small.

"The display on the iPhone is too small for media salespeople to share information with their advertiser," Sales Development Services' Smith says. "A laptop is too cumbersome, too heavy, and takes too long to boot up."

Back at Mercedes-Benz Financial, the pilot program in the dealerships will be reviewed, and if it's deemed a success, the company could distribute iPads to the remainder of Mercedes-Benz USA's 350 dealerships. At this point, that scenario seems a likely outcome.

"We've received really good dealer feedback on the program. They're very excited about it, they use it a lot," Mercedes-Benz Financial's Kanzleiter says. "I think it really offers a whole new range of opportunities."

Joel Mathis is a freelance journalist and a political columnist for Scripps Howard News Service. He lives in Philadelphia.

High Sierra Computer Day Pack

High Sierra's Computer Day Pack ($100, but available for as little as $39 online; www.highsierrasport.com) is one of the few quality-on-a-budget laptop backpacks that can accommodate a 17-inch MacBook Pro. Available in black, green, or "lava" red, the Computer Day Pack provides the usual organizer panel and MP3-player pocket, two side water-bottle pouches, and compression straps to keep the weight of your books and huge laptop close to your body. A mesh pocket on the shoulder strap holds your mobile phone, and the back panel features an opening to slip the bag onto the handle of a rolling suitcase. Perhaps best of all, considering the weight of a 17-inch laptop, the Computer Day Pack itself weighs only 2.1 pounds.—DAN FRAKES

Five Ways to Customize Chrome

Extensions help Google's new browser fit your every need

BY ROB GRIFFITHS

The Mac's newest mainstream browser, Google's free Chrome (★★★★; macworld.com/6549), supports extensions—little bits of code that extend the browser's capabilities. There are a wealth of them—almost all are free—available from Chrome's extensions gallery. But how do you know which ones will be most useful to you? Here's my list of five great Chrome extensions you should check out:

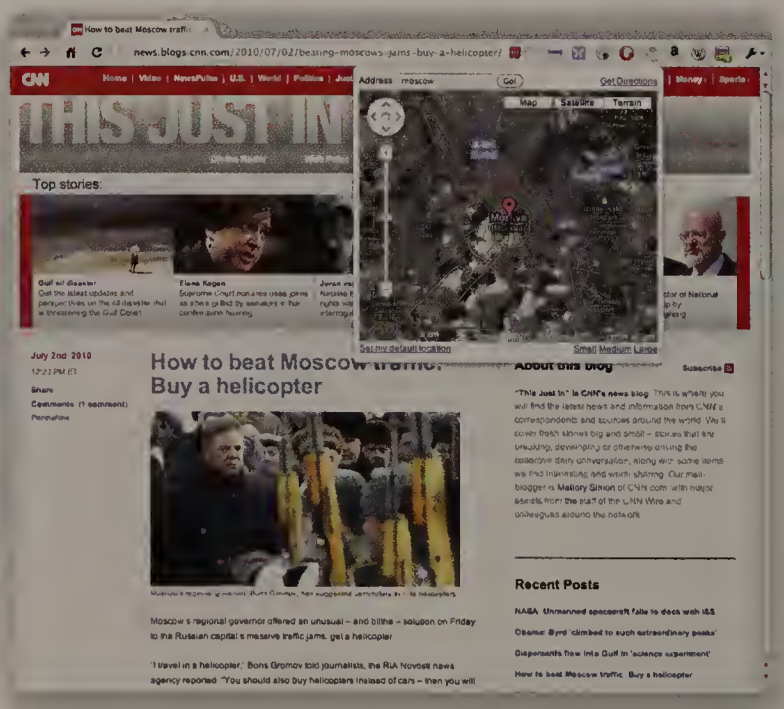
FlashBlock turns any Flash object on a page into a clickable link—no more autoplaying content when you load a page. Instead, you'll see Flash objects clearly marked, and you can play them as you like (macworld.com/6513).

Have you ever come across something while browsing—an address, a city name, a landmark—that you wanted to check out on Google Maps? The usual drill is to open a new tab or window, navigate to Google Maps and then toggle between the two tabs (or windows) as needed. **Mini Google Maps** presents a better solution: Click a toolbar button, and a small map pops up, floating over the corner of the current site. When you're done with the map, click the toolbar button again, and it's gone (macworld.com/6514).

You can easily view PDFs in the Chrome browser window by installing **Docs PDF/PowerPoint Viewer** (you'll need a Google account). Once you install it, PDFs open in the browser instead of in Preview, and you get a search function and some simple controls for layout, size, and navigating pages (macworld.com/6515).

AutoPager Chrome—also available for Mozilla Firefox—eliminates the need to click Next to continue reading something on a Website. Instead, AutoPager fetches and appends the next page to the current page, so as you scroll down, you're moving through a seemingly infinite page. This works not only on articles, but also on Google's search results, and other such list-oriented sites (macworld.com/6516).

Like Mini Google Maps, **Wikipedia Companion–Mini Wiki Browser** gives you a pop-up mini Wikipedia browser, complete with a history of your recent lookups and with back/forward buttons. It's a great way to get more detail on something you're reading without having to leave the page or open a new tab. When you're done with the mini window, press Escape and it vanishes (macworld.com/6517).



Easy Map Access Mini Google Maps lets you pop up a floating Google map any time you need it.

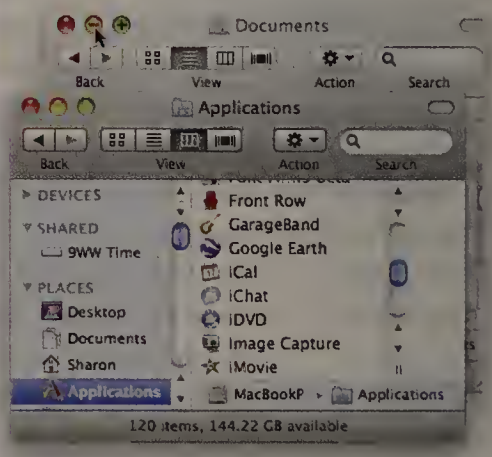
Background Window Tricks

BY SHARON ZARDETTO

When you use your Mac, the general rule is that you can work in only one window at a time. But you can get things done in your "background," or inactive, windows even without clicking one of them to bring it forward.

Close or Rearrange Background Windows You've opened several Finder windows, and now your screen is getting cluttered. Click a background window's close (red) or minimize (yellow) button, and you'll immediately banish that window without deactivating the one you're working in. By holding down the ⌘ key, you can drag a background Finder window by its title bar to reposition it, all while keeping whatever you're working on—a Word document, for example—active.

Scroll in a Background Window Say you're comparing two multipage PDF documents in Preview. You don't have to keep clicking back and forth in the windows to move through both of them. If your trackpad lets you scroll by dragging two fingers, or if you have a mouse with a scroll ball or wheel, hover over the area of the background window you want to scroll, and ... *scroll*. The file in the background window will move, but your Mac will keep the focus on the one in the foreground.



Clear the Clutter Click a background window's close button to make the window disappear without changing your focus.

CIRCUS PONIES

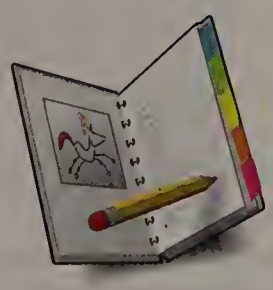
Needs NoteBook

Has NoteBook

Class notes. Rough drafts. Web research. Outlines. Reminders. Take control of it all with Circus Ponies NoteBook, the award winning application for managing information. Get organized using a familiar notebook interface, with pages and tabs, sections and subsections. Create voice-annotated notes and review them from your computer or iPod. Drop in lecture slides and mark them up with text, diagrams and sketches. "Clip" web pages to your Notebooks for later reference. Find anything instantly using NoteBook's patented Multidex™. Share your Notebooks as PDFs or as websites. And much more. NoteBook has everything you need to get organized for school.

"Download NoteBook right now and try it for yourself, FREE for 30 days"

www.circusponies.com/trialmw



CIRCUS PONIES™
NoteBook

Macworld Awards 2010 WINNER

Best Education Product
Macworld UK

ACADEMIC SUPERSTORE amazon.com Apple Store MICRO CENTER Office DEPOT Small Dog Electronics TEKSERVE

© 2010 Circus Ponies Software, Inc. All rights reserved. Circus Ponies, NoteBook, the NoteBook logo, and Multidex are trademarks of Circus Ponies Software, Inc. All other trademarks are the property of their respective owners.

The Mac Mini with Snow Leopard Server

BY JOHN C. WELCH

REVIEW

The Mac mini doesn't look like a server—it doesn't have a redundant power supply or an ethernet port. Up until the current generation, the mini still had an AC power brick. Heck, this server version of the Mac mini doesn't even have an optical drive. However, in spite of all the things it doesn't have, the Mac mini with Snow Leopard Server is a highly useful box that's perfect as a utility server, or a do-it-all small office/home office box. It doesn't require a rack, it doesn't take up a lot of space, and it doesn't use a lot of power.

What You Get

What you get is a small box that ships with a 2.66GHz Intel Core 2 Duo CPU, 4GB of RAM (upgradable to 8GB), dual 500GB 7200-rpm hard drives, one gigabit ethernet port, a FireWire 800 port, an HDMI-out port, a Mini DisplayPort, four USB 2.0 ports, an SD Card slot with SDXC card support, and an nVidia GeForce 320M graphics processor with 256MB of DDR3 SDRAM.

What You Don't Get

The Mac mini has no optical drive, no redundant power supplies, and no ethernet ports. You can work around these limitations, however. If you have to have an optical drive, you can get the Apple MacBook Air SuperDrive ($99; macworld.com/6518). Although with technology like NetBoot (en.wikipedia.org/wiki/NetBoot), that's no longer as necessary as it once was. If you simply must have dual ethernet ports, you can again borrow from the MacBook Air and use the Apple USB Ethernet Adapter ($29; macworld.com/6519). Apple says that the Mac mini server supports both the optical drive and the ethernet adapter for the Air, although you're obviously not going to get the same speed from a USB ethernet adapter as you are from gigabit ethernet.

What It's Good For

The base cost of a Mac mini with Snow Leopard Server is $999, the base cost of a Mac Pro is $2500, and the base cost of an Xserve is $3000. For the cost of a single traditional server, you can get two or three Mac mini servers. But comparing them that way is missing the point. The Mac mini server is not designed to replace a Mac Pro or an Xserve. It's designed for the times when either of those two boxes are simply overkill, or when you lack a server room.

Do you have a company with 1000 users and need a mail cluster that talks to a SAN? The Mac mini server is *not* for you. Have a company with 15 users and need a basic, simple server that can take care of light storage, some e-mail, and basic user management? The Mac mini server will do the job. Need a utility server that's only going to do one thing (Wikis, Chat, Calendaring, internal Websites, light Podcast Producer work, Mobile Access Server, even e-mail) but can't justify spending $3000 or more for that task? The Mac mini server is a great fit. Need a server for a small satellite office? The Mac mini server's great for that too.

Macworld's Buying Advice

The Mac mini with Snow Leopard Server is an outstanding small utility server. It can handle a couple hundred users for almost any single service, (Mail, Chat, Open Directory, and so on). It's also a good "do it all" server for smaller networks with up to 25 users or so. The only real knock against the Mac mini server is that replacing a hard drive is a bit more tedious than it is in a Mac Pro or Xserve. Other than that, for the target audience, this Mac is close to perfect.

John C. Welch is information technology Director for The Zimmerman Agency, and a long-time Mac IT pundit.

4½; $999; Apple, www.apple.com; full review, macworld.com/6520

PHOTOGRAPH BY PETER BELANGER

PRODUCT WATCH

HARDWARE

Bizhub 20, from Konica Minolta (kmbs.konicaminolta.us): Compact multifunction laser printer with color scanner/copier and document feeder ($499).

WorkForce 325 All-in-One Printer, from Epson (www.epson.com): Multifunction printer for home offices and small businesses has an inkjet printer, a scanner, built-in Wi-Fi, and faxing ($100).

SOFTWARE

BusinessMan Enterprise 2, from Computech IT Services (www.businessmancrm.com): Enterprise resource-planning system ($795).

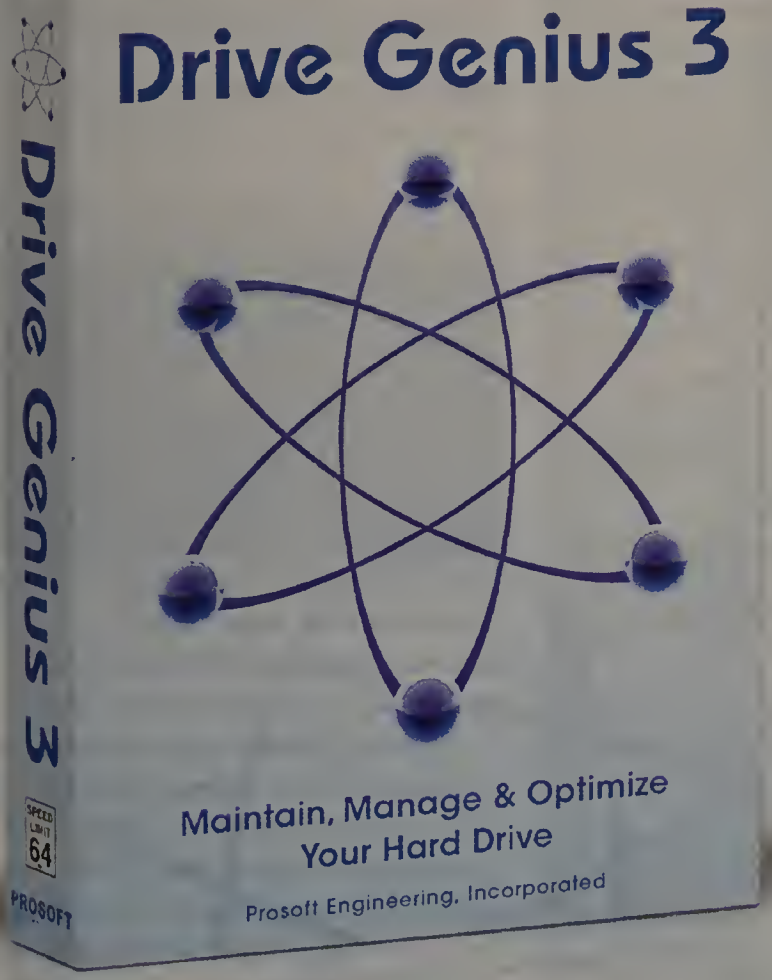
Pear Note 2.0, from Useful Fruit Software (www.usefulfruit.com): This note-taking program, which captures both audio and text, gains sharing and playback features ($40).

Drive Genius 3

MORE POWER · MORE SPEED · MORE OPTIONS

Repair · Sector Edit · Information · Initialize · DriveSlim® · Benchtests · Shred · Clone · Integrity Check

NEW & IMPROVED FEATURES!



SHIPS ON BOOTABLE DVD!

DrivePulse®
Monitors the overall health of your drive, alerting you to possible issues before they become major problems.

64-bit
Runs as a 64-bit application on Mac OS 10.6 or later with a compatible 64-bit processor.

Enhanced Defrag
Provides even better defragmentation of your files and even more fragmentation information in a new user interface.

RAID Support
Support for hardware RAID and Apple's software RAID.

Enhanced Repartition
Add, delete, hide, expand or shrink OS X partitions so you can organize your drive more efficiently.

Scan
Realtime bad-block scanning and an extended block verification test that stress tests the read/write validity.

Email Notifications
E-mail notifications can be sent when long-running tasks complete and you are away from your computer.

DRIVE GENIUS 1 & 2 AWARDS!!!

© COPYRIGHT 2010 PROSOFT ENGINEERING, INC. ALL RIGHTS RESERVED.

PROSOFT
engineering, inc.
303 Ray Street - Pleasanton - CA - 94566
1-877-477-6763
www.prosoftengineering.com

REVIEWS

Hardware and Software for All Your Business Needs

HARDWARE

Canon Pixma MX340 △

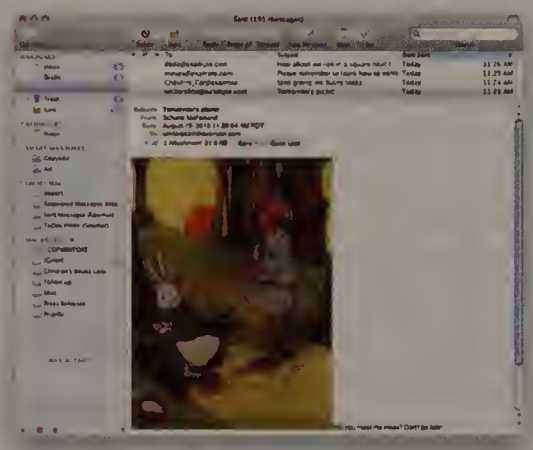
Canon's Pixma MX340 color inkjet multifunction device (with print, scan, copy, and fax capabilities) looks like a bargain until you factor in its pricey inks. The Pixma MX340's two standout features are Wi-Fi connectivity and a 30-sheet automatic document feeder. In our tests, the Pixma MX340 printed plain text at 5.8 ppm. A near-letter-size image took 2.5 minutes to print (about 0.3 ppm). The Pixma MX340's ink costs per page are higher than average, especially for black ink. The unit's standard-size supplies include a 200-page PG-210 black cartridge ($16, or 8.0 cents per page) and a 244-page CL-211 unified color cartridge ($22, or 9.0 cents per page). A four-color page would cost 16.3 cents. The Pixma MX340 does everything needed of an MFP for a low entry price. But if you do a lot of printing, you'll be better off with a model that has more affordable inks (macworld.com/6521).

●●●; $100; Canon, www.usa.canon.com

Lexmark Pinnacle Pro901 ▷

Lexmark's Pinnacle Pro901 color inkjet multifunction printer (which handles printing, scanning, copying, and faxing) is priced on the high side, but it's packed with features that would satisfy a busy home or small office. Lexmark sweetens the deal with supercheap black ink and a five-year warranty. The Pinnacle Pro901's noteworthy feature is its 4.3-inch touchscreen control panel, which gives the machine a clean look and is easy to use. Other features include a 50-page automatic document feeder and automatic duplexing (two-sided printing). Media slots accommodate SD Card, XD Picture Card, Memory Stick/MultiMediaCard, and USB/PictBridge media. When it comes to handling text, the Pinnacle Pro901 shines. Its speed is nothing special: 3.9 ppm, but text quality was unbelievably black and crisp. What's more, this model can use Lexmark's 105XL high-yield black cartridge, which costs only $5 and lasts for 510 pages—a scant penny per page (macworld.com/6423).

●●●½; $300; Lexmark, www.lexmark.com



SOFTWARE

Mail 4.3 △

The latest iteration of Apple's Mail client, which comes with Mac OS X 10.6 (Snow Leopard), seems little changed on the surface. Its greatest improvements lie under the hood. The new Mail's biggest selling point is its built-in support for Microsoft Exchange 2007, which lets Mail now work fluently with e-mail systems built for Microsoft's Outlook. If you prefer to use a Mac at home, but work for an all-Windows company, you'll no longer need Webmail or a remote-access client to get your business mail. You can now rearrange the order of the folders and other items in the sidebar, including entire categories. Apple also boasts that Mail's data detectors now recognize flight data as well. Mouse over a flight number, and you can automatically launch the Flight Status widget in Dashboard for up-to-the-minute information. Overall, Mail 4.3 offers the same dependable, well-crafted, easy-to-use interface it always has (macworld.com/6523).

●●●●; free with Mac OS X 10.6; Apple, www.apple.com

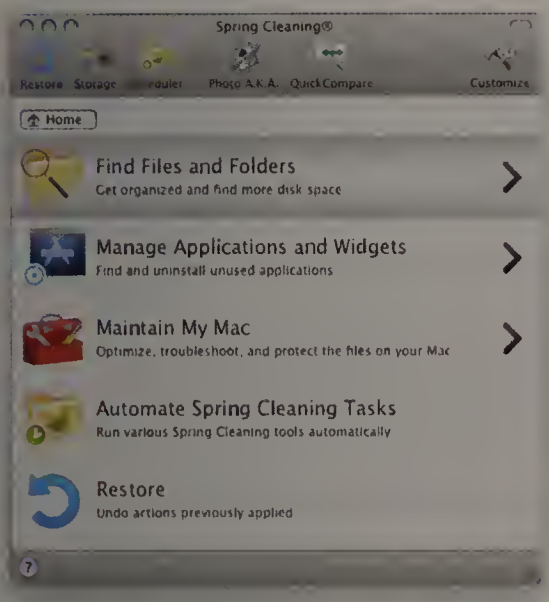
Spector Pro Mac 2010 △

SpectorSoft's Spector Pro Mac 2010 is designed to watch the activity on a computer and then provide you with reports about what's taking place. But what's unusual here is that Spector Pro lets you *see* exactly what's taking place. Spector Pro takes a sequence of screenshots, providing you with a time-lapse movie of activity on the monitored Mac. You can view these screen snaps like a movie by using the Spector Pro application. The program also captures information including complete iChat and other IM transcripts, e-mail messages sent and received, the identities of users who are accessing these programs, and every Web search made on the computer. SpectorPro will record every Web page that a user visits, even if they select Safari's Private

Find It Online

For expanded reviews, type the blue URL at the end of each summary into your browser's address bar.

Browsing option. Spector Pro also offers you the option of blocking Websites, although it will not block any page set as the user's default Home Page. If you find you have a need to monitor a Mac in your care, you won't find a better application than Spector Pro (macworld.com/6524).
4½; $100; SpectorSoft, www.spectorsoft.com



Spring Cleaning 11 Deluxe △

Spring Cleaning 11 Deluxe deep cleans your Mac in a way that would be very difficult to do by hand. It removes stray application files (the ones left behind when you drag a program to the Trash to uninstall it), makes quick backups, inspects file properties, and searches for huge files you've forgotten about. In the process, it helps uncover system problems and storage hogs. Sure, you could use Spotlight and a few other tools to perform some of the same functions, but not as easily. This version adds the ability to make a backup of files before deleting them. The new MagnaFile inspector shows you a wealth of information about files, such as the creation date and Spotlight tags. For folders, you can quickly see storage specs on a usage ratio bar with a bright green indicator. Version 11 offers a new custom search option, which lets you save the search criteria in a reusable set. So from within Spring Cleaning, you can quickly find stray files and then decide what to do with them (macworld.com/6525).
3½; $50; Smith Micro, store.smithmicro.com

Top Products YOUR GUIDE TO THE BEST HARDWARE WE'VE TESTED

HARD DRIVES Desktop

PRODUCT	RATING	PRICE[A]	TYPE	FIND CODE[B]
iT1 Dock (pictured) www.istoragepro.com	4	$329 (2TB)	quad interface	5843
Rocpro 850 www.rocstor.com	4	$129 (500GB)	quad interface	5397
VR Mini www.caldigit.com	4	$629 (1TB)	quad interface	5396

HARD DRIVES Portable

PRODUCT	RATING	PRICE[A]	TYPE	FIND CODE[B]
eGo Mac Edition www.iomega.com	4	$122 (500GB)	triple interface	5219
Mercury On-the-Go (pictured) www.macsales.com	4½	$180 (320GB, 7200 rpm)	triple interface	4258
Pocket iT1PKT72320 www.istoragepro.com	4	$259 (320GB)	dual interface	5808

INPUT DEVICES Keyboards, Mice, Pen Tablets

PRODUCT	RATING	PRICE[A]	TYPE	FIND CODE[B]
Intuos4 Wireless intuos.wacom.com	4½	$399	pen tablet	6422
Magic Trackpad www.apple.com	4	$69	trackpad	6436
TactilePro 3 (pictured) www.matias.ca	4½	$150	keyboard	6421

PRINTERS Laser

PRODUCT	RATING	PRICE[A]	TYPE	FIND CODE[B]
5130cdn (pictured) www.dell.com	4½	$1549	LED, color	6009
C544DN www.lexmark.com	4½	$399	LED, color	4356
HL-4070CDW www.brother-usa.com	4½	$336	PostScript-compatible	3385

PRINTERS Multifunction

PRODUCT	RATING	PRICE[A]	TYPE	FIND CODE[B]
Artisan 810 (pictured) www.epson.com	3½	$300	inkjet	5916
Color LaserJet CM1312nfi www.hp.com	4	$350	laser	5183
Pinnacle Pro901 www.lexmark.com	3½	$199	inkjet	6423

[A] All prices are the best current prices taken from a PriceGrabber survey of retailers at press time. [B] In a browser's address field, typing a find code after *macworld.com/* takes you to a product's review or overview.

BUSINESS CENTER

News and Analysis about Macs in the Workplace

Microsoft Releases Office Security Updates

The new version of Office for Mac will be out any day now, but in the meantime Microsoft's Mac Business Unit released a pair of security- and stability-enhancing updates for Office 2008 and Office 2004 (microsoft.com/mac).

The Microsoft Office 2008 for Mac 12.2.6 update contains improvements to stability and compatibility. It also fixes vulnerabilities that would allow attackers to overwrite your Mac's memory with malicious code. In addition, Microsoft released a Microsoft Entourage 2008 for Mac, Web Services Edition, an update that promises calendaring improvements and the ability to sync notes, tasks, and categories with Exchange Server. The update also enables logging that can be used for diagnostic purposes.

Microsoft Office 2004 for Mac 11.6.0 improves security and fixes a vulnerability that can result in malicious code being run on your Mac. This 192MB update applies to users of Office 2004 Standard Edition, Office 2004 Student and Teacher Edition, Office 2004 Professional Edition, Word 2004, Excel 2004, PowerPoint 2004, and Entourage 2004.

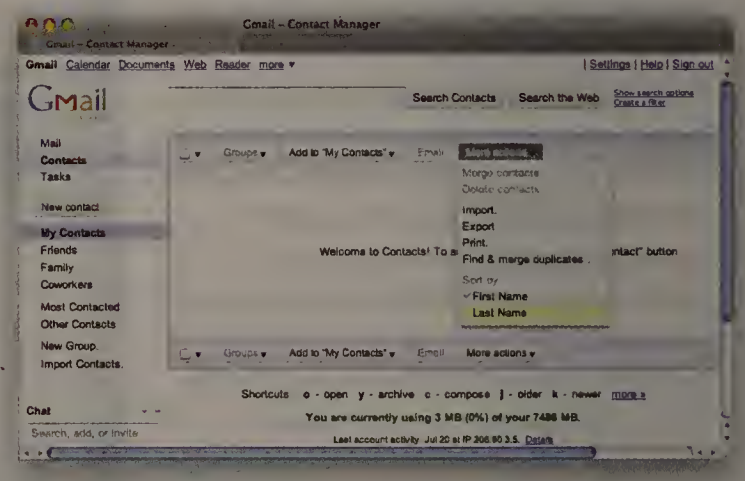
Microsoft released Open XML File Format Converter for Mac 1.1.6, a utility that lets users of earlier versions of Office open files created in Office 2008 or Office 2007 for Windows. Use the Microsoft AutoUpdate tool (in /Applications) or download the updates from Microsoft (macworld.com/6078).—**DAVID DAHLQUIST**

Sophos Unveils Enterprise-Level Encryption

Security firm Sophos (www.sophos.com) unveiled a new version of its enterprise-class SafeGuard disk-encryption application for the Mac. SafeGuard Disk Encryption for Mac is targeted at enterprise employees and IT departments that are increasingly adopting Apple's computers. SafeGuard uses AES 256-bit encryption to encrypt Mac volumes, including the boot drive and any separate data drives. The encryption and decryption processes are transparent to the user, and SafeGuard allows for secure multiuser power-on authentication (POA), which requires a valid login to boot the system.

Administrators can remotely manage their encrypted Macs, and view detailed logs that record user interaction and failed login attempts. They can also create recovery tools on a USB flash drive or CD, and can reset forgotten passwords for users. Interested businesses should contact Sophos for pricing. Customers of Sophos's Endpoint Security and Data Protection, the company's all-in-one malware and data-protection service, can add SafeGuard Disk Encryption for Mac at no additional licensing cost.—**DAVID CHARTIER**

Google Improves Gmail Contacts Manager



Google rolled out enhancements to Gmail's contacts manager (www.gmail.com), which the company admits has, until now, been the Webmail service's weakest link. Users of individual Gmail accounts saw the new contacts manager immediately, but those who use Gmail as part of Google Apps will have to wait until an unspecified date.

New features include keyboard shortcuts, automatic saving, the ability to sort by last name, and an undo option. Also new are a bigger field for notes and what Google calls "structured name fields" for items like people's titles and suffixes. A tweak to Gmail's layout now makes it easier to access both the contacts and task managers, which have been placed more prominently on the top left corner of the interface.

The improvements to the contacts manager will help Gmail better compete against Microsoft's Outlook in the workplace market, since the Microsoft product has very good contact-management tools, says analyst Michael Osterman, president of Osterman Research. Although Outlook and Microsoft Exchange will remain the dominant e-mail platform in the business space over the next several years, Gmail's use is growing, he says.—**JUAN CARLOS PEREZ**

Your music
never sounded
so good.

QuietComfort® 15

Acoustic Noise Cancelling® headphones

Welcome to a better sounding world, where your music comes alive as never before. The QC®15 headphones are our best, with Bose® technologies that deliver sound more naturally than conventional headphones. And a significant improvement in the noise reduction helps you focus on each nuance of your music, as distractions fade into the background. Seth Porges reports in Popular Mechanics that "Compared to the competition...the QC15s are vastly superior." It's a difference you need to hear to believe. We're so sure you'll be delighted, we'll even pay to ship them to your door.

To learn more: 1-800-760-2749, ext. Q8050
Bose.com/headphones

©2010 Bose Corporation Patent rights issued and/or pending. The distinctive design of the headphone oval ring is a trademark of Bose Corporation. Quote reprinted with permission.

BOSE®
Better sound through research®

iPod Bonanza

Apple introduces new shuffle, nano, and touch models—we review them all

REVIEW It just wouldn't be a holiday season without new iPods, and Apple has been happy to oblige once again. The company announced its latest crop of portable players in September, and we've got hands-on reviews of all the new models.

4G iPod Touch (Late 2010)

In many people's minds, the iPod touch is simply an iPhone without the phone and GPS features—no cellular voice calls, no texting, and no EDGE or 3G wireless service. But it's the remaining features the two devices share—or lack—on which the iPod touch is most often judged. In the case of the fourth-generation (4G) iPod touch—available in 8GB (★★★★½; $229; macworld.com/6553), 32GB (★★★★½; $299; macworld.com/6554), and 64GB (★★★★½; $399; macworld.com/6555) capacities—the two devices come closer to feature parity than ever before. (Especially this time around, as all three iPod touch models have the same features, unlike the previous generation of touches.) This enhanced feature set makes for a compelling iPod.

The touch's images are far less detailed than the iPhone 4's, and more susceptible to being blown out in bright light.

Similarities and Differences

The 4G iPod touch has slimmed down to about half the thickness of the iPhone 4, even while gaining a built-in omnidirectional microphone and both a high-definition rear-facing camera and a standard-definition front-facing camera. Thanks to the built-in mic and an improved speaker, the touch has become a better device for making Skype and Voice-over-IP calls, too.

Like the iPhone 4, the 4G iPod touch has a 960-by-640-pixel Retina display. The display has a slightly yellower cast than previous iPod touch displays do.

Inside, the 4G iPod touch packs Apple's A4 processor—the same kind of chip found in the iPhone 4 and the iPad. The new touch performs about the same as the 3G touch, but it's noticeably more responsive than the first- and second-generation iPod touches.

As with previous iPod touches, this one has no GPS hardware. Like the iPhone 4, however, it has a gyroscope—making for a richer gaming experience with apps that take advantage of the gyroscope's ability to sense roll, yaw, and pitch.

And thanks to iOS 4.1, the 4G iPod touch provides better support for AVRCP (Audio/Video Remote Control Profile)—a Bluetooth profile that lets you control playback functions with A2DP devices such as headphones and speakers. In practical terms this means that the iPod touch now responds not only to play/pause and volume commands from A2DP devices, but also to next- and previous-track commands.

For a complete listing of all iPods and links to more-detailed versions of these reviews, see the "iPods: Current Lineup" table on page 76.

PHOTOGRAPHS COURTESY OF APPLE

iPod Touch as Video Camera

Although the rear-facing camera shoots video at the same 720p (1280 by 720) resolution as the iPhone 4, the touch's videos appear to be slightly zoomed out compared to the iPhone's. Also, the iPod's rear-facing camera is more likely to produce washed-out results in bright-light conditions than the iPhone 4's camera.

In underlit conditions you can more clearly see the difference between the two devices' cameras. The touch's video is grainier and shows less detail. And, unlike the iPhone 4, the iPod lacks a flash. Instead, the iPod touch includes a backside illumination sensor, which is designed to make the rear-facing camera perform better in low light. Yet even with this sensor, the iPod touch's results were poorer than the iPhone 4's.

iPod Touch as Still Camera

The iPhone 4's camera captures stills at 1936 by 2592 pixels (5 megapixels), while the iPod touch's rear-facing camera shoots at 720 by 960 pixels (less than 1 megapixel). The touch's images are far less detailed and more susceptible to being blown out when shot in bright light. Unless you're shooting under ideal conditions or you don't have a better camera at hand, this is not the camera you want to use to create prints.

FaceTime

With the cameras comes FaceTime, and it works very much as it does on the iPhone 4 (although the touch uses e-mail addresses rather than phone numbers to place or receive a FaceTime call). The feature worked very well.

Macworld's Buying Advice

The iPod touch is an extremely versatile device—media player; pocket gaming machine; productivity tool; Internet communication device; and now, pocket camcorder, still camera, and FaceTime video phone. The FaceTime support allows us to more easily forgive the touch's less-than-pristine images and movies.

—CHRISTOPHER BREEN

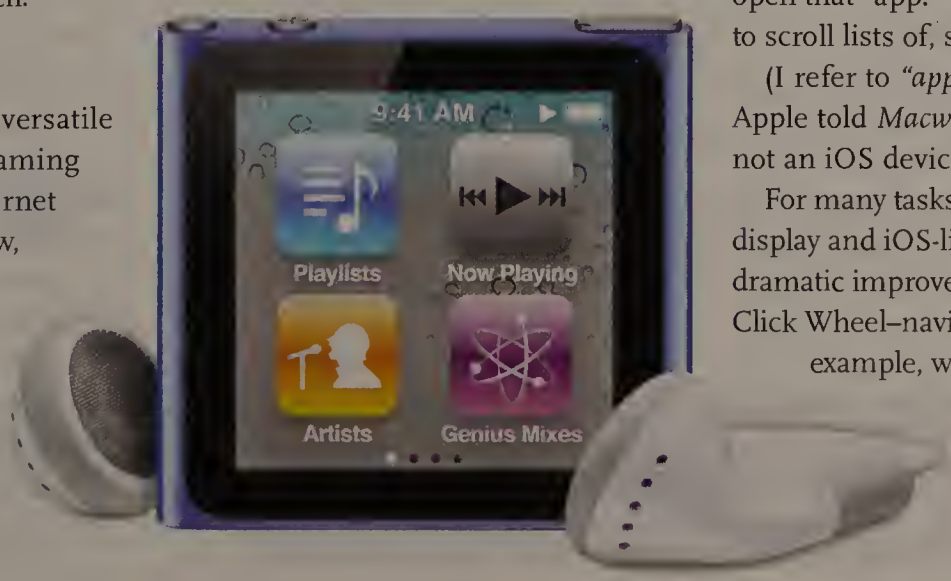
6G iPod Nano (Late 2010)

No iPod model has received as many makeovers as the iPod nano. With the release of the sixth-generation (6G) iPod nano, the line has undergone its most dramatic redesign yet—and Apple's iconic Click Wheel is nowhere to be found. In its place you will find a Multi-Touch screen similar to the one on Apple's iOS devices.

Hip to Be Square

The new nano, available in the same 8GB (3½; $149; macworld.com/6551) and 16GB (3½; $179; macworld.com/6552) capacities as before, but in seven new colors, still sports an aluminum shell, but it now takes a considerably smaller shape: Instead of being rectangular, it's nearly square, at just 1.5 inches tall and 1.6 inches wide. But the 6G nano is also the thickest nano yet—0.35 inches—thanks to a built-in, spring-loaded clip, like the one on the iPod shuffle.

On the top of the nano are a Sleep/Wake button and shuffle-like Volume Down and Volume Up buttons. In fact, the new nano looks very much like an oversized version of the new iPod shuffle. Well, except for the fact that it has no playback buttons.



Can Touch This

"No playback buttons? You mean this is another third-generation iPod shuffle debacle?" Not exactly. The front of the new nano sports a square (1.54-inch diagonal) LCD screen with a resolution of 240 by 240 pixels. This display is quite a bit smaller than the 240-by-376-pixel display of the 5G iPod nano, but the new screen mostly makes up for its smaller size with Multi-Touch functionality: You control most of the nano's features by touching the screen.

In place of the traditional iPod interface of hierarchical menus listing functions and media, you now see "app" icons floating over a user-configurable background—four icons per screen, with one icon for each major feature or category: Playlists, Now Playing, Artists, Genius Mixes, Radio, Podcasts, Photos, Settings, Songs, Albums, Genres, Composers, Fitness, Clock, Audiobooks (if you've synced one or more audiobooks to the iPod), and Voice Memos (if a microphone is attached). You swipe the screen to the left or right to view another group of four, and you tap an icon to open that "app." You swipe up and down to scroll lists of, say, tracks or artists.

(I refer to *"app"* in quotes because Apple told *Macworld* that the nano is not an iOS device.)

For many tasks, the Multi-Touch display and iOS-like interface are dramatic improvements on the older, Click Wheel–navigated menus (for example, when you're scrolling through a long list of tracks or artists). Similarly, some of the features that were

present in previous nanos are now much more useful (such as photo viewing and using the built-in FM radio).

Another standout feature made possible by Multi-Touch is the ability to rotate the nano's entire interface, 90 degrees at a time, by placing two fingers on the screen and twisting clockwise or counterclockwise. This lets you view the nano's screen "right side up" regardless of where you clip the iPod or how it's oriented.

Multi-Touch Misses

At 220 pixels per inch, the new nano's screen is clear and easy to read. But its tiny size means you end up swiping and scrolling a lot to see entries, and there's no title bar for a clock. The big question is why the nano's screen had to be so small.

Missing in Action

The 6G iPod nano jettisons the capabilities to record or even watch video; search for media or choose audiobook playback speeds; and sync contacts, calendars, and notes to the iPod.

The lack of physical playback controls also makes the nano less useful when, say, the iPod is in your pocket; and Apple doesn't include the type of headphones that lets you adjust volume, toggle Play/Pause, skip or scan forward or back, and access some VoiceOver features.

4G iPod Shuffle (Late 2010)

I'm on the record somewhere as saying that my favorite iPod of all time is the second-generation (2G) iPod shuffle. There was just something about that little baby, with its clip-on body and its circle of easy-to-navigate control buttons, that I found irresistible. On the other hand, the buttonless third-generation (3G) shuffle was an example of Apple's design language taken to an extreme.

Now here's the $49 fourth-generation (4G) iPod shuffle model, which brings back the best of the 2G model. Unlike the now-disgraced 3G shuffle, which was available in 2GB ($59) and 4GB ($79) variations (as well as a $99 stainless-steel special-edition model), this new shuffle comes in a single configuration: 2GB (♦♦♦♦; $49; macworld.com/6550)—enough to hold "hundreds of songs," according to Apple. You do, however, get your choice of five colors: silver, blue, green, orange, and pink.

The new shuffle is the best Apple has made, bringing back a classic design that works well with almost any set of headphones

Macworld's Buying Advice

The new iPod nano is a bit of an enigma. If you've always wanted the touchscreen interface of the iPod touch on a smaller, audio-only device, the new nano is a pretty good 1.0 product. Yet the new interface suffers a bit from being confined to a tiny screen, features found in previous models are missing, and the lack of physical playback controls means the device is less usable than it could be. I'm already looking forward to next year's model.—DAN FRAKES

The squarish 4G shuffle poses a small usability problem, however. The controls of the more-rectangular 2G shuffle were off center, situated away from the side of the device where the clip hinged. This provided enough space for a thumb and finger to pinch the clip open.

The 4G shuffle has no such extra space. As a result, squeezing the clip open and attaching it to clothing without inadvertently pressing the back button is much trickier.

The new shuffle does retain the 3G's best attribute, though: If you press the VoiceOver button, the iPod will speak the title and artist of the track that it's playing. (A quick double-tap of the VoiceOver button gives you battery status too.)

Holding down the VoiceOver button for a second or so puts you in navigation mode; the device will start speaking the names of all its playlists, as well as "All Songs" and any podcasts or audiobooks you've synced. You can use the left and right navigation buttons to quickly move through the list, or just wait as the iPod's voice reads them to you at a leisurely pace. If you press the center button as one of the selections is being read, the iPod immediately begins playing that selection.

If you use a set of headphones with in-line controls (not included by Apple), a single click toggles playback, a double-click advances forward one track, and a triple-click takes you back a track. The headphone button can also act as the shuffle's VoiceOver button. Some headphones can control volume, as well.

One disappointment is a feature from the previous shuffle that's missing: If you held down its center button for a few seconds, it would lock out all the controls until you pressed and held the center button again for a few seconds. I used that feature constantly to prevent inadvertent button presses.

Macworld's Buying Advice

The 4G shuffle brings back a classic design that works well with almost any set of headphones. At $49, it's not only the perfect entry-level iPod, it's also a solid second device for iPhone users who want to keep it simple while exercising. This is the best iPod shuffle Apple has ever made.—JASON SNELL

PHOTOGRAPH COURTESY OF APPLE

Unmask Your Child's Online Identity

See Everything They Do Online

It's easy... Just press PLAY to watch a DVR-like playback of all computer and Internet activity.

PLAY

Does Your Child Have a Secret Online Life?

The typical teenager has more than 100 chat buddies and 'friends' on MySpace and Facebook. Do you know who your children talk to online? What pictures they post and view? Are they pretending to be someone they're not?

Trust, Monitor, Protect, and Educate with Spector Pro

With Spector Pro, you'll rest easy knowing that your child is protected online with the world's most trusted monitoring software. It records everything on their computer, laptop, netbook or Mac – including chats, instant messages, emails, websites they visit, all activity on Facebook and MySpace, and much more. You can block unwanted chats and websites, and even "rewind and play" screen snapshots of everything they said and viewed on friends' profile pages – giving you total visibility into their online identity and choices they're making.

Recently awarded the 2010 Mom's Choice Award, Spector Pro gives you everything you need to ensure their safety, while helping them make smarter, safer decisions online.

SPECTOR PRO®
Computer & Internet Monitoring Software

View an online demo today
www.SpectorProForParents.com

Call us anytime
1.877.569.3073

iTunes 10 Goes Social

Apple adds Ping social networking, but changes the interface in baffling ways

BY DAVID CHARTIER

REVIEW I don't think you could be blamed for assuming that iTunes 10 is a major update—after all, 10 is a big number, and it marks iTunes' foray into double digits. But Apple seems to have used some restraint this time around, introducing only one major new feature while noticeably improving performance. However, the company has still slapped on a haphazard array of interface changes.

iTunes Goes to 10 Helpful new views and playback controls in iTunes 10 are offset by the half-baked Ping and the draining of color from the sidebar.

Ping Me

The one key new feature in iTunes 10 is Ping—an optional social network for music that Apple built into iTunes 10. Friends can follow, view, and comment on each other's new purchases and songs they "like," as well as stay on top of upcoming concerts. Artists can create store pages, interact with fans, and post photos and videos.

Although it's fun to see what my friends are buying and to let others across the country jump into the conversation, Ping leaves a lot to be desired.

There's no way to be notified of new activity, such as when friends make new comments or your favorite artists post something new to their pages. The only way you can add new friends is by typing in their names or e-mail addresses. How very 2003. Perhaps most importantly, Ping is currently restricted to music (and only music that's on the iTunes Store, to boot).

Of course, you can bet Apple will make a steady flow of updates to Ping and, hopefully, extend the feature to the other types of media on the iTunes Store.

Other New Features

Though pitched mostly for future owners of the new Apple TV, iTunes 10 offers current users the ability to rent TV shows. AirPlay (an evolution of AirTunes) is also an interesting new feature that will let iTunes stream music and video to new AirPlay-enabled speakers, receivers, and iPod accessories.

If you click the album artwork at the lower left, the window it opens now includes player controls when you mouse over it.

Other perks in iTunes 10 include a new Album List view that displays album artwork more intelligently, and new preferences that let you hide features like the checkboxes next to media in list view and the icons next to sidebar items. iTunes 10 also received a speed boost—it starts up faster and the interface feels a bit snappier.

Apple did remove one feature from iTunes 10, however: You can no longer buy ringtones from the iTunes Store; nor can you create them from tracks within iTunes. Creating ringtones with third-party tools still seems to work.

Tossing Interface Darts

Once again, various iTunes elements both big and small have changed; many for the sake of change, and some to the detriment of usability. First, the buttons to close, minimize, and "best fit" iTunes (the red, yellow, and green orbs, respectively, that are laid out horizontally at the top left of virtually every window in Mac OS X) are now listed vertically down the top left of the window. In a way, this is not a new layout for these buttons—for quite some time they've shifted vertically when you use iTunes' Mini Player. But initially, many across the Internet sounded a cry of horror upon seeing this change in iTunes 10, as if a million interface designers cried out at once. But the complaints have subsided.

Inexplicably, Apple's second major interface change was to suck the color out of iTunes' sidebar icons. Gone are the blue, green, and purple hues for Music, Movies, iTunes Store, and Smart Playlists icons—they've faded to a pale gray.

Macworld's Buying Advice

iTunes 10 seems like a foundational update. Ping, at its core, is a great idea but it has a ways to go. And speedier performance is great to have as well. But version 10 leaves room for improvement.

; Apple, www.apple.com;
full review, macworld.com/6572

Ultra™ case

www.ultra-case.com

UltraSkin

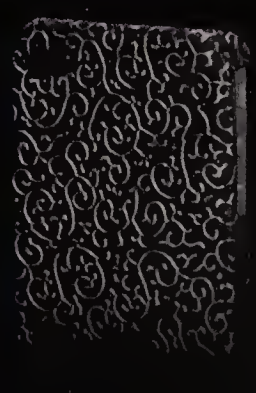
designed for iPhone 4

Mono Classic Series

Wildcat Series

Ecstasy Series

Reptile Series



Armor Series

Pine Series

Walnut Series

Cork Series

Viper Series

Carve Series

Apple TV Makeover

BY JASON SNELL AND JONATHAN SEFF

The Apple TV was released in 2006, and even with a subsequently updated interface, added features, and price cuts, it was never what we'd call a success. Part of that can be attributed to the fact that Apple considered it a "hobby" and never really devoted the time or resources to make it a better product; but as Steve Jobs admitted during his introduction of the new Apple TV, the product also didn't give customers what they wanted.

It lacked content and quality, cost too much (both the device and the downloaded media), and was too complicated. The Apple TV reboot is an attempt to address those issues and make it a well-respected member of the Apple ecosystem. (We say *attempt* because it's too early to tell if the new model will satisfy current owners or convince those who've never used an Apple TV to take the plunge.)

Radical Change

This new Apple TV certainly wins on the hardware front: It's a quarter the size of the original, a tiny black box that will likely run cool and quiet due to its lack of a hard drive. You can pick it up and hold it in the palm of your hand, easily. On the back is a small selection of ports, far fewer than on the previous model. If you don't have a TV that supports HDMI, forget it—this device has only an HDMI port for video out. It also has an optical-audio port, an ethernet jack (along with built-in 802.11n networking), and a USB port that Apple says is designed for support use only and not for end-user functions.

The Apple TV's video features rely heavily on an iTunes Store rental model: Movies in HD will cost $4 for library titles and $5 for new releases; TV shows will go for just $1. Apple also offers standard-definition movies for $4 for new releases and $3 for library titles. As was previously the case, you must watch rentals within 30 days; once you begin watching a movie, you need to finish it within 24 hours. With TV shows, on the other hand, you get a 48-hour window for viewing. The Apple TV will also track which television episodes you've watched. (You can't buy stuff anymore—you can only rent movies and TV shows. If you want to buy something and keep it forever, you'll need to do that on your computer and then stream it to the Apple TV.)

Apple's Netflix instant-watch implementation is very much in keeping with the Apple TV's design philosophy.

On the inside, the specs have been updated to support 720p video at 30 frames per second (the previous model could hack only 24fps, and even then there were often issues). This is a big deal because a lot of TV content is delivered at 30 frames per second, and Apple wants everything on the new Apple TV to be in HD, including TV rentals (although Apple does offer some standard-definition TV show rentals—for any content not available in HD—at the same $1-an-episode price).

Welcome, Netflix

As for the interface itself, it will be pretty familiar to current Apple TV users. It's the same remote-driven UI, featuring a series of menu items from left to right, though some of the details have changed. And Apple has incorporated Netflix streaming into the device: The instant-watch implementation Apple has added is very much in keeping with the Apple TV's design philosophy, rather than looking like every other Netflix implementation we've seen on various stand-alone and embedded devices. (Previous Apple TV models won't gain Netflix-streaming capabilities.)

We'll have to wait and see if the price drop to $99 is low enough to entice the curious who would never have dropped $200-plus on such a device.

PHOTOGRAPH COURTESY OF APPLE

BIG SAVINGS
ON PROFESSIONAL WEB SOLUTIONS

With 1&1, you get premium web design software, and 50% off the first 6 months on our most popular web hosting plans.

NOW GET 50% OFF PLUS FREE SOFTWARE*
HURRY – OFFERS END 10/31/2010!

1&1® HOME PACKAGE

- 2 Domain Names Included (.com, .net, .org, .info or .biz.)
- 150 GB Web Space
- UNLIMITED Traffic
- 10 FTP Accounts
- 25 MySQL Databases
- Extensive Programming Language Support: Perl, Python, PHP4, PHP5, PHP6 (beta) with Zend® Framework
- NetObjects Fusion® 1&1 Edition

~~$6.99 per month~~

$3.49* per month for the first 6 months

1&1® BUSINESS PACKAGE

- 3 Domain Names Included (.com, .net, .org, .info or .biz.)
- 250 GB Web Space
- UNLIMITED Traffic
- 25 FTP Accounts
- 50 MySQL Databases
- Extensive Programming Language Support: Perl, Python, PHP4, PHP5, PHP6 (beta) with Zend® Framework
- NetObjects Fusion® 1&1 Edition or Adobe® Dreamweaver CS4

~~$9.99 per month~~

$4.99* per month for the first 6 months

1&1® DEVELOPER PACKAGE

- 5 Domain Names Included (.com, .net, .org, .info or .biz.)
- 300 GB Web Space
- UNLIMITED Traffic
- 50 FTP Accounts
- 100 MySQL Databases
- Extensive Programming Language Support: Perl, Python, PHP4, PHP5, PHP6 (beta) with Zend® Framework
- NetObjects Fusion® 1&1 Edition or Adobe® Dreamweaver CS4
- NEW: 1&1 Power Plus Performance Guarantee

~~$19.99 per month~~

$9.99* per month for the first 6 months

ALSO ON SALE:
.us domains $0.99/first year*
.com domains $7.99/first year*
Visit our website for a full list of special offers.

1&1®

MEMBER OF united internet

Get started today, call 1-877-GO-1AND1 **www.1and1.com**

*12 month minimum contract term required for software offer. Setup fee and other terms and conditions may apply. Software compatible with Windows operating systems only, and is available for download in the 1&1 Control Panel. Domain offer valid first year only. After first year, standard pricing applies. Visit www.1and1.com for full promotional offer details. Program and pricing specifications and availability subject to change without notice. 1&1 and the 1&1 logo are trademarks of 1&1 Internet AG, all other trademarks are the property of their respective owners. © 2010 1&1 Internet, Inc. All rights reserved.

REVIEWS

Home Entertainment Hardware, Software, and Accessories

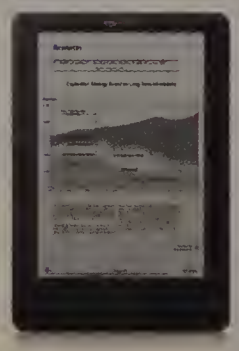
HARDWARE

Amazon Kindle (3rd Generation) ▷

Like the Kindle DX (Graphite), the Kindle now has a 6-inch E-Ink Pearl display, one of whose benefits is 50 percent better contrast. The difference in the screen contrast is striking: Blacks look more solid, and text looks smoother. Another benefit of the Pearl display is faster screen refresh rates, which provide a significantly improved user experience. And for the budget-conscious, Amazon now offers a $139 Wi-Fi–only model for the first time (macworld.com/6538).

●●●●½; Wi-Fi/3G, $189; Wi-Fi, $139; Amazon.com, www.amazon.com

Amazon Kindle DX (Graphite) ▷



All it took was turning on the Amazon Kindle DX (Graphite) second-generation large-format e-reader to see that Amazon's claims of a higher-contrast display than its predecessor were true. The E-Ink Pearl display indeed reflects a significant improvement in contrast, as evidenced by the clarity of the crisp text, and the darker blacks of graphics and words alike. And the device's lower price makes it that much more attractive (macworld.com/6539).

●●●●; $359; Amazon.com, www.amazon.com

Creative HS-930i ▷

Like other *canalbud*-style headsets, the HS-930i essentially splits the difference between traditional earbuds and in-ear-canal—or *canal-phone*—models. The HS-930i emphasizes higher frequencies (particularly noticeable when we listened to music that was heavy on the cymbals). While a few test tracks sounded overly bright and grating, treble is generally clean and detailed. Microphone performance was above average and more than adequate for voice memos and phone calls (macworld.com/6540).

●●●●; $100; Creative Technology, www.creative.com

Logitech Squeezebox Touch ▷

The Squeezebox Touch is a great way to connect Internet music sources and your own music collection to a set of external speakers, especially in a home theater setup. While its display is not as big or as bright as that of its predecessor, the Squeezebox Classic, the fact that it's a touchscreen means that you don't have to hunt for a remote control in order to quickly turn down the sound or skip a track. Using the touchscreen to control the Touch interface is hardly iPhone-like in its sensitivity and ease of use, but it's still entirely usable (macworld.com/6541).

●●●●; $300; Logitech, www.logitech.com

SOFTWARE

Turbo.264 HD Software Edition 1.1 △

The Turbo.264 HD Software Edition video transcoder can do many of the same things as the hardware-enabled version, but at half the price: and like the hardware version, it gives you the ability to work directly with AVDHD footage (macworld.com/6544).

●●●●; $50; Elgato, www.elgato.com

iPods: Current Lineup

PRODUCT	SPECS	RATING	PRICE [A]	DISPLAY	PERFORMANCE	FIND CODE [B]
iPod Classic	160GB	●●●●	$249	2.5-inch color	36 hours of music playback; 6 hours of video playback	5262
iPod Touch	8GB	●●●●½	$229	3.5-inch color	40 hours of music playback; 7 hours of video playback	6553
	32GB	●●●●½	$299	3.5-inch color	40 hours of music playback; 7 hours of video playback	6554
	64GB	●●●●½	$399	3.5-inch color	40 hours of music playback; 7 hours of video playback	6555
iPod Nano	8GB	●●●½	$149	1.5-inch color	24 hours of music playback; 5 hours of video playback	6551
	16GB	●●●½	$179	1.5-inch color	24 hours of music playback; 5 hours of video playback	6552
iPod Shuffle	2GB	●●●●	$49	none	15 hours of music playback	6550

[A] All prices are Apple's prices. [B] In a browser's address field, typing a find code after *macworld.com/* takes you to a product's review or overview.

SCOSCHE®
the necessary accessory

work, play & surf on the fly

foldIO™ P1

Folio Case for iPad with Multiple Viewing Angles

- Suede interior lining for enhanced protection
- Three-position landscape viewing
- Ultra low-profile design
- Open design allows complete access to all connections and controls

Faux Leather
IPDL

Faux Carbon Fiber
IPDCF

iPad
16GB 32GB 64GB

IDR655m
Increased Dynamic Range earphones with tapLINE II control technology for iPad, iPhone and iPod
(shown above - sold separetly)

© 2010 Scosche Industries, Inc.
iPad is a trademark of Apple Inc.

SCOSCHE® 30 YEARS
www.scosche.com 800.363.4490

Secrets of an iPhoto Editing Pro

Six hidden tips that will make editing images in iPhoto fast and easy

BY DERRICK STORY

Apple's iPhoto has more powers than even seasoned iPhoto users realize. Here are a handful of my favorite iPhoto image-editing shortcuts and tips.

Keep Skin Realistic The image on the left has the Avoid Saturating The Skin Tones setting turned off in the Adjust palette; the image on the right has it on.

Make a Shortcut for Editing

I spend far more time looking at pictures in iPhoto than I do editing them. So in the General pane of iPhoto ▸ Preferences, I have the Double-Click Photo option set to Magnifies Photo. That way, when I double-click on a thumbnail, I see a bigger version of the shot. However, when I do want to edit an image instead of just viewing it, all I have to do is hold down the Option key when I double-click. This takes me directly to Edit mode instead.

Quick Zoom for a Closer Look

To take a closer look at a particular area when in Edit mode, place your mouse over the area you want to magnify and then press the 1 key. iPhoto takes you to a 100 percent view of the very spot you want to see. Want to get even closer? Press the 2 key. Now you're at 200 percent. Press the 0 key to return to the normal view.

Recover Blown-Out Highlights

Raw shooters have an extra goody just for them in the Adjust palette: a hidden slider for recovering highlights. This is a subtle tool for bringing detail back in the superbright areas of an image. I find the Recovery slider much less heavy-handed than the Highlights slider, which tends to dull the entire image.

To use the Recovery slider, first find a raw file in iPhoto and go into Edit mode. Then open the Adjust palette by pressing the letter A on your keyboard. Hold down the Option key, and you'll see that the Exposure slider becomes the Recovery slider. You can be aggressive with this adjustment without worrying about compromising your image.

Add Vibrancy to a Dull Scene

iPhoto has a Vibrancy slider that lets you increase the richness of color without polluting the overall picture, especially skin tones. To enable it, check the box labeled Avoid Saturating The Skin Tones that appears beneath the Saturation slider in the Adjust palette. Even though the slider's label remains the same, the results you get will be very different. Checking the box not only helps protect the skin tones from odd color tints, but it protects the entire photo from becoming garish. Your boosted colors will look far more natural.

Fine-tune the Enhance Tool

Enhance is one of those amazing tools that can transform your photo from dull to dazzling with a single click. You can even fine-tune the results.

While in Edit mode, open the Adjust palette first. Note the position of its various sliders. Now, with Adjust open, click on the Enhance tool (the magic wand icon). After your picture is enhanced, iPhoto tells you exactly what it did by moving the sliders in the Adjust palette. Not only can you learn how Enhance works its magic, you can fine-tune the results by further adjusting the sliders.

See Before and After

How do you know you're actually making your picture better than the original shot? You can easily check your work at any time by pressing the Shift key, which shows you the original image; take your finger off the key, and the edited version reappears. If you don't like what you've done, iPhoto always lets you go back to the original shot via the Revert command: either Photos ▸ Revert To Previous or Revert To Original.

Derrick Story teaches photography on Lynda.com and publishes a weekly podcast at The Digital Story (thedigitalstory.com).

Pixelmator Ups Its Game

The popular and sleek image editor gets increased speed and new tools in version 1.6

BY BEN LONG

REVIEW The affordable image editor Pixelmator has a new version available, code-named Nucleus. The update, which works only on Macs running Mac OS X 10.6 and later, includes new features and speed improvements that make this full-featured image editor even more appealing than before, and a real competitor to Adobe Photoshop Elements.

Looking at the Layout The Pixelmator 1.6 setup at a glance: The slick interface design is still one of Pixelmator's most appealing features.

What's Included

Pixelmator 1.6 retains the program's well-developed toolset, which includes most of the things you'd expect of a modern image editor. On the left you'll see a Photoshop-like toolbox, complete with color pickers and buttons for a quick-mask mode. Brushes, selection tools, rubber stamp, sharpen/blur, text, and more are available and work just as you'd expect them to.

The tools are responsive and smartly implemented—Pixelmator even supports pressure-sensitive tablets for your brush tools. For selections, you can choose from a number of tools, the most advanced being the magic wand tool; but for retouching, you're limited to the clone stamp.

Pixelmator also includes a large suite of effects filters. Their controls appear in a small floating palette, and the effects are applied to your image in real time.

What's New

One of this release's best improvements is its speed. Pixelmator 1.6 features 64-bit support and makes heavy use of your Mac's graphics processor. The result is greatly increased speeds and overall zippiness, from a 2-second launch time to real-time previews of full-screen filters. This speed boost really pays off when you're executing a complex edit or effect.

Another useful new addition in version 1.6 is the File ▸ Send To menu. Here you can instantly include one image in an e-mail, export it to iPhoto, or upload it to Facebook, Flickr, or Picasa. The menu also integrates with OS X's Image Capture program for quick importing.

For compositing in Pixelmator, you have the Layers palette, which comes complete with layer masks and transfer modes. The Masks palette lets you save any selections you've made. In this release, Pixelmator has gained the ability to group layers, allowing for a cleaner, more organized workspace. This capability also enables you to apply certain edits to a batch of layers at once.

What's Missing

While Pixelmator's Photo Browser palette gives you access to all of the images in your iPhoto library, there's no file browser, so you don't have an easy way to browse thumbnails of images outside of iPhoto.

Though the toolset is very good, it does lack dodge and burn tools, and the program offers no red-eye fix of any kind. While the program packs a very full assortment of global editing tools, you can't apply these edits nondestructively.

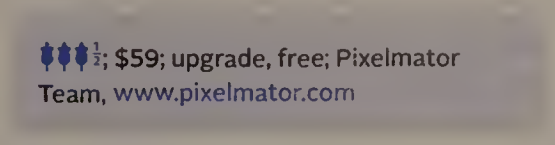
Pixelmator can open raw files via OS X's built-in raw engine. So if you can open a raw file in iPhoto, Preview, or Aperture, or preview it with QuickLook in the Finder, it will open in Pixelmator. However, you get no parameters for controlling the raw conversion.

Finally, with the magic wand tool as your most advanced selection tool, you'll be hard-pressed to do much sophisticated masking or compositing.

Buying Advice

Pixelmator is extremely appealing, with its well-defined feature set, beautiful interface, impressively fast performance, and low price. That said, most people would likely forgo the $59 Pixelmator for the $89 Photoshop Elements, which packs more editing tools, adjustment layers, Bridge, and more. But if low price is the most important criterion to you, then Pixelmator 1.6 is a great option.

Ben Long is the author of *Complete Digital Photography*, fifth edition (Charles River Media, 2009).



$59; upgrade, free; Pixelmator Team, www.pixelmator.com

The Art of Cropping

A smart crop is a simple way to drastically improve any photo

BY BEN LONG

Modern image-editing programs are packed with powerful adjustment tools that provide complex algorithms for radically altering the color, tone, and even content of an image. Despite all this technology, though, you'll often find that the single best tool for saving a bad image is your crop tool.

Instant Panorama Putting the horizon line in the bottom third of the photo and cropping out the excess sky turns this regular landscape photo into a powerful panorama.

Do a Basic Crop

Many times, you crop simply to remove extra image area, not to perform a radical recomposition of your image.

If you have a snapshot portrait of two people, look at the headroom above them. We don't really need to see ceiling lamps or sky, so a simple crop will tighten up the image, focus the attention on the subjects, and make them fill the frame more.

People occasionally respond to the notion of cropping out background by saying, "But I wanted to show the room." Most of the time, if you want a picture of, say, a room, a statue, or a building, or of a background element of some kind, you should take a picture of that thing. If you want a portrait, that's a separate picture.

Don't Go Too Small

When you crop, you reduce the total number of pixels in your image. If you ultimately intend to print your image, then you'll need to be careful about how much you crop. Crop too much, and you'll have an image that doesn't have enough resolution to make a good print.

If you're printing to an inkjet photo printer, you ideally want around 240 pixels per inch (ppi) at your given print size. You can probably get away with a resolution as low as 180 ppi, but if you go much lower than that, you'll see a marked softening of your image. Fortunately, since most cameras these days have a high pixel count, you can crop a lot before you get down to an image that's too small for viable printing.

Consider the Aspect Ratio

The *aspect ratio* is the ratio of an image's width to its height. Most digital SLRs have an aspect ratio of 3:2, while most point-and-shoots have a 4:3 aspect ratio. When you crop, you can choose to preserve the original aspect ratio or crop freely to create a different aspect ratio that works better for the image.

For example, a landscape image might look better if you cropped it to a very wide, short aspect ratio, to accentuate its sweeping view. In fact, you'll often shoot such images with the idea of cropping them later, since it's not always possible to get the crop that you want in camera.

Crop for Better Composition

When cropping, think about the same compositional ideas you do when shooting. Your goal is to help the viewer understand what the subject of your image is. Any extra information can be tossed aside.

Remember that you can trust your viewer to understand quite a bit. For example, we don't need a lot of sky, water, and sand to understand that a person is on a beach.

When cropping landscapes, you'll want to think carefully about where you want the horizon. In the image above, I was struck by a sense of Shiprock sticking up out of the great plain upon which it sits. As shot, it's a little overpowered by sky, though. By cropping it so that the horizon was lower than the middle, I've reduced the amount of foreground that's visible and increased the sense of the scale of the rock formation. At the same time, I've reduced the overbearing sky, and made Shiprock the dominant form.

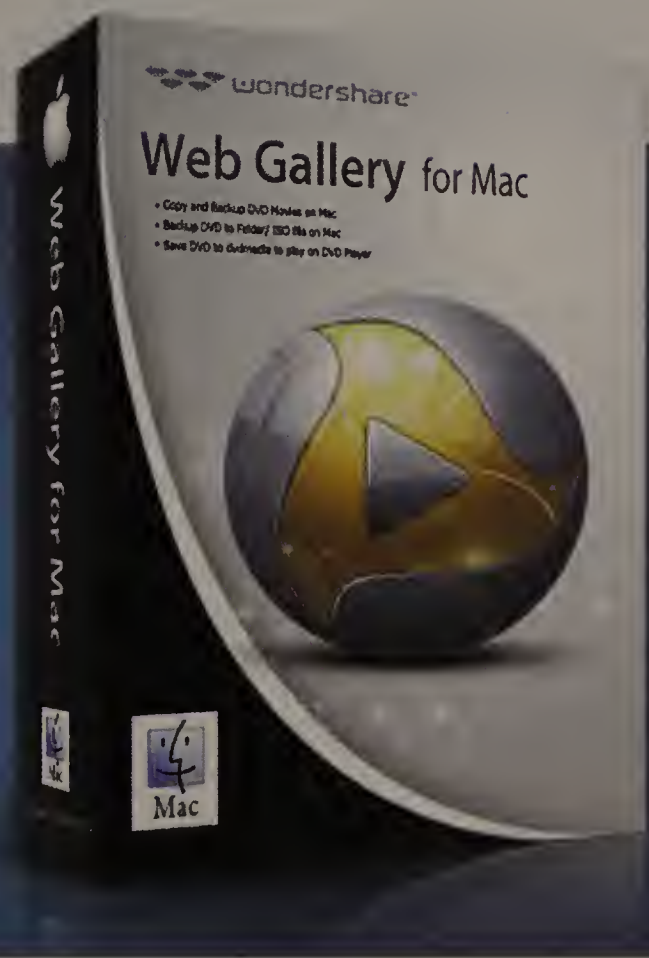
Practice Good Crops

Like the rest of your photo skills, cropping is something that improves with practice. Watch out for bad habits—such as leaving too much headroom in the frame, or not filling the frame with only what matters. Over time, you'll find that this understanding impacts your shooting, and that you take fewer images that require cropping.

wondershare®
The software wisdom shared worldwide

easy clicks unequal amateurish processing

It's time to quit those perplexing programs and try Wondershare's easy-to-use tools!



A must-have tool

to combine photos into web albums easily

- ☑ Offer numerous free templates including 3D style
- ☑ Enhance picture quality with built-in photo editor
- ☑ Free to add and edit music in photo slideshows
- ☑ Add captions, descriptions & hyperlinks on photos
- ☑ Quick share to MySpace, Blogger and other sites

For a trial and more information, please visit:

www.wondershare.com/mac

Wondershare Software keeps focusing on bringing users the most easy-to-use experience in terms of

Multimedia | Business | PC Utility | Mobile

YouTube www.youtube.com/wondershare

www.facebook.com/wondershare

www.twitter.com/wondershare

Mac

Supported OS:

Mac OS X 10.4 (Tiger) /Mac OS X 10.5 (Leopard)
Mac OS X 10.6 (Snow Leopard)

Wondershare is not responsible for typographical, photographic or other errors. Information is subject to change without notice Wondershare, Wondershare logo, AnyBizSoft and AnyBizSoft logo are trademarks of Wondershare Software Co , Ltd. Mac and Mac OS are trademarks of Apple Inc. Copyright © 2010 Wondershare Software Co., Ltd All rights reserved.

Do Camera Phones Beat Point-and-Shoots?

BY TIM MOYNIHAN

It's getting harder to make the case that a stand-alone camera is a must-have device for casual photographers. There are several ways in which the puny-lensed, small-sensored camera on your smartphone offers a better overall photography experience than a snapshot camera.

App Stores

The App Store feature is one way that smartphone cameras are outdoing dedicated cameras, but it actually represents infinity-plus-one ways, because that's the number of features it could add to your camera.

When you buy a camera, you're effectively locked into the modes and features included in the preinstalled firmware. If camera makers provided camera-specific app stores, those would take care of many of the shortcomings that point-and-shoots have compared with smartphones. That way, you could add full-featured in-camera editing suites such as Apple's iMovie and Adobe's Photoshop.com Mobile. You could also download in-camera tutorials and field guides for the types of photography you're interested in.

Wireless-Sharing Features

Stand-alone cameras have a lot of catching up to do in the realm of wireless sharing, as well, since they're three steps behind the smartphone curve: They have no cellular data options, no full Web browsers, and inferior interfaces for accessing the Web.

Today's phones beat any camera's Wi-Fi–based sharing options (such as Eye-Fi cards) by offering the upload-anywhere convenience of a 3G or an EDGE connection. They let you switch to Wi-Fi when you need it, and support more-refined interfaces for uploading photos to sharing and social-networking sites. Wi-Fi–enabled cameras still seem to treat Web access as an afterthought.

Big Screens and Touchscreens

While cameras and their LCD screens are getting smaller, smartphone screens are getting larger. Their razor-sharp resolutions, such as the iPhone 4's 326-pixels-per-inch Retina display, remain crisp and clear even when viewed in bright sunlight. A smartphone's huge screen does a better job of complementing the extended-arm shooting style that has become the norm with today's point-and-shoot cameras, as well as providing a more enjoyable way for the user to view photos.

Innovative Design Ideas

Cameras are built to take pictures, and their pedestrian software serves primarily as a way to manage the hardware and in-camera settings. What's missing from these interfaces is the smartphone's spirit of rethinking, from the ground up, how to use the device.

Certainly, camera designers don't need to fix what isn't broken or to scrap tried-and-true user interfaces. But because so many point-and-shoot cameras offer the same basic specs and button layout, it would be great to see more experimentation with body styles and user interfaces. A mere range of color options just doesn't cut it anymore.

Unleash the iPad's Image-Editing Powers

BY BEAU COLBURN

iPad users can sync images over iTunes or import photos from cameras, memory cards, and even an iPhone by using the Apple Camera Connection Kit ($29; macworld.com/6259). Users can then edit those images with the following iPad versions of popular iPhone photo-editing apps.

Photogene This app does a little bit of everything, including adding preset filters and art effects. It also allows you to crop and straighten your images, and adjust exposure and levels. It even has a Photoshop-style Curves adjustment ($4; macworld.com/6575).

CameraBag This app's appeal is its retro simplicity. The iPad version retains this aesthetic while adding a few helpful new options. There are 10 filters to choose from that mimic familiar camera types and looks. You can choose to crop an image and add any border to your chosen filter ($3; macworld.com/6576).

TiltShift Generator The tilt-shift effect can make some photo subjects look like toy models. TiltShift Generator also lets you adjust saturation, contrast, and brightness ($3; macworld.com/6577).

ILLUSTRATION BY ALEX EBEN MEYER

FREE EDUCATIONAL RESOURCES FOR PHOTOGRAPHERS AT EVERY SKILL LEVEL

VIDEO TUTORIALS

HOW-TO ARTICLES

PRODUCT REVIEWS

WORKSHOPS @ADORAMA

BUYING GUIDES

WATCH. LEARN. CREATE.

VISIT US AT ADORAMATV.COM, ADORAMA.COM/ALC
OR THE iTUNES STORE.

ADORAMA tv

adoramatv.com | adorama.com/alc | adorama learning center

SNAP IT. SAVE IT.

SHARE IT. SHOW IT.

VISIT OUR STORE
42 W 18 ST [5+6 AV] NYC
800-223-2500

ADORAMA.COM

REVIEWS

Hardware, Software, and Accessories for Making and Managing Photographs

HARDWARE

Olympus PEN E-PL1 △

The PEN E-PL1 is a compact camera with interchangeable lenses from Olympus. Though its size and shape make it too big to slip into a pocket, you can easily carry the 0.75-pound E-PL1 on your shoulder all day without strain. If you've been considering a larger point-and-shoot, you might want to take a look at the E-PL1. Compared to other point-and-shoots, this camera scores with its larger image sensor (which yields decent image quality in low light), removable lenses, raw support, and full manual modes. While the learning curve for the camera's interface can be difficult, the iAuto modes make for an excellent learning tool. This is a camera you'll be able to grow with over time (macworld.com/6562).

●●●; $600; Olympus, www.olympusamerica.com

Casio Exilim EX-FH100 △

Though the Casio EX-FH100 pocket megazoom camera offers slick, curvy looks to frame its 10X optical zoom lens (24mm to 240mm), the main attraction for shutterbugs is its unique high-speed shooting mode. It's also a good all-purpose camera, thanks to its good image quality and long battery life. The sacrifices are lens control, a bit of video quality, and less-exciting scene modes than what you get from Sony, Canon, and Samsung (macworld.com/6333).

●●●½; $350; Casio, www.casio.com

Canon PowerShot SD4000 IS ▷

Thanks to its very good image quality, wide-aperture lens (f2.0), and aperture-priority and shutter-priority modes, the 10-megapixel Canon PowerShot SD4000 IS is a standout camera in the current compact point-and-shoot class. Although its glossy finish, lack of physical buttons, and pocket-friendly size would suggest otherwise, the SD4000's

performance is on a par with that of the excellent Canon PowerShot S90. Casual snapshooters who want access to controls beyond auto and scene modes will be delighted with its performance, though it lacks full manual controls (macworld.com/6563).

●●●½; $350; Canon, www.canon.com

Top Products YOUR GUIDE TO THE BEST HARDWARE WE'VE TESTED

DIGITAL CAMERAS
SLR

PRODUCT	RATING	PRICE [A]	TYPE	FIND CODE [B]
Alpha NEX-5 www.sonystyle.com	●●●●	$631	14.2-megapixel	6334
D3000 (pictured) imaging.nikon.com	●●●●	$450	10.2-megapixel	6090
EOS 7D www.canon.com	●●●●	$1569	18-megapixel	6014

DIGITAL CAMERAS
Point-and-Shoot

PRODUCT	RATING	PRICE [A]	TYPE	FIND CODE [B]
HZ35W (pictured) www.samsung.com	●●●●	$220	12-megapixel	6331
PowerShot SX210 IS www.canon.com	●●●●	$299	14.1-megapixel	6330

PRINTERS
Inkjet

PRODUCT	RATING	PRICE [A]	TYPE	FIND CODE [B]
Officejet Pro 8000 Wireless (pictured) www.hp.com	●●●●	$80	document, photo	6017
PictureMate Dash PM 260 www.epson.com	●●●●	$107	snapshot, photo	5609

[A] All prices are the best current prices taken from a PriceGrabber survey of retailers at press time. [B] In a browser's address field, typing a find code after *macworld.com/* takes you to a product's review or overview.

No one can put a price on the treasures on your computer.

But backing them up automatically is just $55 a year.

Imagine how devastated you'd feel if you were to lose irreplaceable files from your computer. For just pennies a day, Carbonite™ Online Backup will make sure that never happens.

Carbonite automatically encrypts and saves your files to secure offsite data centers. It's quick and easy to set up on both PCs and Macs. Should anything ever happen to your computer you can easily restore your files. And you can securely access them anywhere—even from an iPhone or BlackBerry® smartphone.

Visit carbonite.com and use offer code CB165 to start your 15-day FREE Trial and get an additional 2 months FREE with purchase.

- Unlimited online backup
- Backs up files automatically
- Encrypts your files for privacy
- Easy setup for PCs and Macs
- Works quietly in the background
- Access your files from any computer, iPhone or BlackBerry®

Try it **FREE** now at
carbonite.com
or call 1-800-327-4097

Use offer code CB165 to start your FREE Trial and get
2 MONTHS FREE
upon purchase.

CARBONITE™
Back it up. Get it back.

TWO MONTHS FREE

Act now to protect your valuable computer files.

x Records	Business Plans	Music	Graphics
nancial Records	Calendars	Homework	Payments
mail	Contacts	Documents	Videos
etters	Photographs	Bookmarks	Recipes

©2010 Carbonite, Inc.

iTunes Art School

How to create your own album artwork in iTunes

BY CHRIS MCVEIGH

An iTunes file that has no cover artwork is a bit sad; it lacks character and is difficult to spot when you're quickly sifting through your library. Although it's easy enough to grab cover artwork for commercially available music and movies (iTunes actually allows you to do this by Control- or right-clicking the file and choosing Get Album Artwork), you probably won't find any artwork for your old band's demo tape. The solution: Make your own cover artwork and add it to your songs, shows, or movies.

Fonts Matter Make sure the text you add is legible. Avoid placing it on top of high-contrast elements.

What You'll Need

Open Photoshop CS3, CS4, or CS5 and choose File ▸ New; or, in the case of Photoshop Elements 8 or 9, choose File ▸ New ▸ Blank File. Now you'll need to set the pixel resolution of the canvas. Artwork included with items purchased through the iTunes Store is typically 600 by 600 pixels (at 72 dpi), and for consistency, you should stick to this resolution. (You can add larger artwork if you like, but keep in mind that the bigger the image, the bigger the file size. A 5MB song file can double to 10MB with the addition of high-resolution artwork.) Once you've set the resolution, click OK.

Great album cover artwork begins with a strong concept. So you'll want to fill your canvas with a fun background and perhaps some funky text. But first, you'll need to find these components. Here's a roundup of sources for art, photos, and fonts.

Art Using your own artwork on the cover is always fun, whether it's hand drawn or something you've created in Photoshop. People who aren't as artistically inclined can find awesome artwork and interesting textures at sites like DeviantArt (www.deviantart.com). Just be sure to check that the artwork is available via Creative Commons (creativecommons.org) licensing, meaning that you have permission to use it with certain conditions. (If you're not sure whether your use qualifies, e-mail the artist and ask for clarification.)

Photos Your own photos are a natural choice for your cover, so be sure to launch iPhoto, Aperture, or Lightroom and see if you can find anything that fits your album concept. If you're not a photographer, you might try searching Flickr's Creative Commons (www.flickr.com/creativecommons), which has many pictures that are available under the Creative Commons license.

Fonts You can find thousands of cool and quirky fonts online, many of them for free. Check out sites such as Dafont.com (www.dafont.com), 1001 Free Fonts (1001freefonts.com), and Font Freak (fontfreak.com). I'm especially fond of John Martz's (www.johnmartz.com/fonts) toyware cartoon and comic book fonts.

Design Guidelines

It's difficult to set rigid rules for creating album cover artwork, but here are a few helpful guidelines. Choosing a background image can be challenging, and you must keep in mind where you want to position your text. This area should be relatively low contrast (an image of the sky or a sandy beach, for example, or just a visually simple area).

Once you've chosen a background, open it in Photoshop or Photoshop Elements. The first thing you'll want to do is crop the image to a square. Choose the Rectangular Marquee Tool, hold down the Shift key (to lock the aspect ratio to a square), and drag the cursor across the area of the image that you would like to use. Now choose Image ▸ Crop. You should also scale down large images before pasting them into your

canvas. In Photoshop, choose Image ▸ Image Size, enter a pixel resolution of 600 by 600 pixels, and click OK; in Photoshop Elements, choose Image ▸ Resize ▸ Image Size, type in a pixel resolution of 600 by 600, and click OK (make sure the Constrain Proportions and Resample Image boxes are selected, and change the Resolution to 72 dpi before adjusting the width and height). Choose Select ▸ All and then Edit ▸ Copy; then flip back to your cover artwork canvas and choose Edit ▸ Paste.

Now add a title. Click the Text tool, select your font, and then click the part of the canvas where you want to write. Avoid using overly small or thin text, as it may not be legible on the iPhone or iPod touch. You should also steer clear of super-saturated colors because they can be difficult to read. If you're feeling a little wild, you can add nuance to the text by using Layer Styles. (In Photoshop, choose Layer ▸ Layer Style ▸ Blending Options; in Photoshop Elements, choose Layer ▸ Layer Style ▸ Style Settings.)

Getting your cover artwork just right can take some time; be sure to save your file regularly in the standard Photoshop or Photoshop Elements file format.

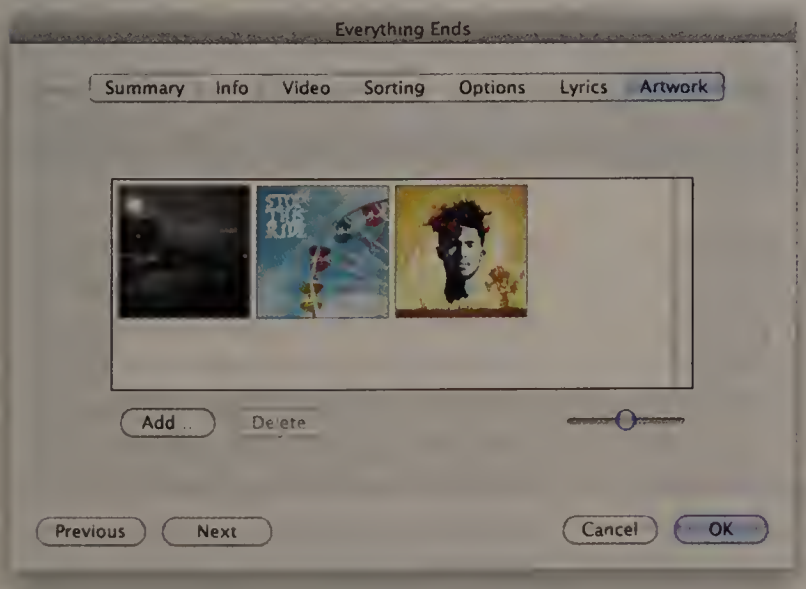
Add the Artwork to iTunes

Once you've completed your new album cover, adding it to iTunes is a cinch. You'll need to flatten the file first; to do so, choose Layer ▸ Flatten Image. Now copy it to the clipboard by choosing Select ▸ All and then Edit ▸ Copy.

Open iTunes and locate the file to which you want to add artwork. Click once to highlight it and then choose File ▸ Get Info. A general info window will appear, and you'll see a row of tabs along the top; to continue, click Artwork. You can now add your artwork by choosing Edit ▸ Paste. There's a slider at the bottom right of the window; dragging it to the left will show you all artwork in the file. If there's any existing artwork that you want to remove, click it once to highlight it and then choose Edit ▸ Delete or click your keyboard's Delete button.

You don't need to remove the original artwork; you can add multiple images to the file if you like. Add each cover by choosing Edit ▸ Paste. To determine the album artwork that is displayed in Cover Flow, use the slider to show all artwork in the file, and then drag the preferred image to the top-left position. To lock in your changes, click OK. If you don't see your image loaded in Cover Flow, try closing and relaunching iTunes.

No doubt, you'll also want your album cover to show up in the Selected Item/Now Playing box at the bottom left corner of the iTunes window. Just drag and drop the image into that box, and from then on, the image will show up both in Cover Flow and in the Selected Item box. If you have more than one image stored in the iTunes file, you can use the navigational arrows to choose which one shows up.

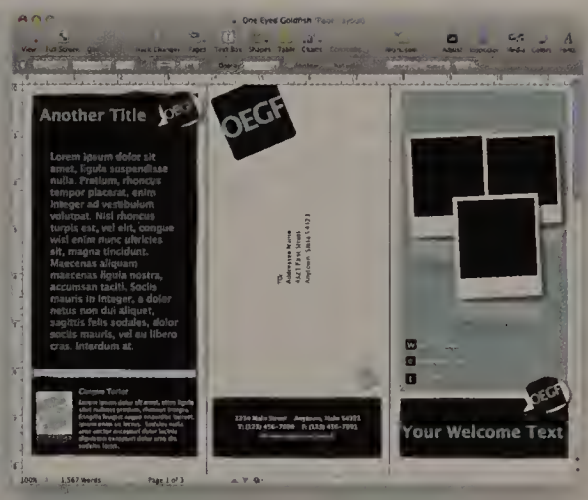


Pick a Cover You can add more than one image to a track; the top left image is the one that appears in Cover Flow.

Share the Art

Coming up with album cover artwork can be a lot of fun. Once you've added cover artwork to a file, you can send the file to others. Just drag it out of iTunes and pop it into an e-mail message!

Chris McVeigh is an author, illustrator, and toy photographer based in Halifax, Nova Scotia.



Offbeat Pages Designs

BY ADAM BERENSTAIN

With nearly 200 built-in templates, Pages '09 lets you get to work quickly. But if Pages doesn't have the right template for your next document, you can create your own or snag one online. Here are some offbeat sources for new designs.

One Eyed Goldfish's (www.oneeyedgoldfish.com) 22 free templates bring bold designs and bright colors to business and creative documents. (Prices: Payment is requested.)

Inkd (inkd.com) and **StockLayouts** (www.stocklayouts.com) are worth a look if you need a particular design quickly. Most templates are intended for very specific business uses, making them similar to the custom work of professional designers rather than just generic templates. Inkd sells more than 1800 templates that offer a hip, artistic sensibility. Designs boast a blend of retro and contemporary looks. Templates work in Pages '08 and later. (Prices: Individual templates, $29 to $99; three-month subscriptions start at $199.)

Other Pages template sites include **Keynote Pro** (www.keynotepro.com), **Foozoo Design** (www.foozoodesign.com/pages.html), **Jumsoft** (www.jumsoft.com), and **iWorkCommunity** (www.iworkcommunity.com), which offers over 300 free templates.

Reprising History

Apple donates MacPaint code and QuickDraw Library to Computer History Museum

BY SERENITY CALDWELL

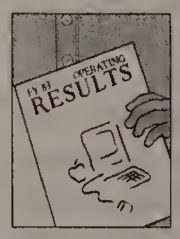
If you were a Mac user in the 1980s, chances are you knew—and loved—Apple's MacPaint drawing program, developed by Bill Atkinson (www.billatkinson.com). The application, which paved the way for programs such as Photoshop by developing key tools like the paint bucket and the lasso, has long been remembered fondly by developers and users alike. Recently, its source code was formally inaugurated into the Computer History Museum's online collection (macworld.com/6532).

Bloomberg Businessweek has the full story of the program's journey from discarded diskette to museum piece (macworld.com/6561). After declaring MacPaint "the best program ever written" at an event celebrating the Macintosh's 20th anniversary, then–Stanford University computer science professor Don Knuth asked those in attendance if they knew how he might get his hands on the original source code, to study it as research for an upcoming book.

Sitting in the audience that night was former Macintosh developer Andy Hertzfeld (who has become somewhat of a historian at Folklore [www.folklore.org], and a chronicler of the early years of Apple [macworld.com/6533]). Out of curiosity, he called up Atkinson to see if he still had a copy of the code lying around.

Atkinson did indeed still have a copy, though restoring it proved to be initially challenging, as the floppy disks had been formatted for a developmental operating system version of Apple's Lisa computer. After finding a suitable machine to get "the bits out of the box," Atkinson and Hertzfeld then had to deal with the difficult task of convincing Apple, which still owned the software, to release the source code to the public for historical research.

Though Apple initially seemed amenable to such an idea, a series of unfortunate roadblocks prevented anything from happening until January 2010, when Hertzfeld met with Steve Jobs personally to discuss the request. With Apple's CEO on the case, the request was pushed through almost immediately, and the code is now freely available on the Web through the Computer History Museum.



With Apple's CEO on the case, the request was pushed through...and the code is now available on the Web.

Additionally, Apple has provided the museum with the source code for QuickDraw, a component of the original Macintosh OS that provided for the creation of bitmapped graphics for MacPaint and other programs. According to Hertzfeld, this source code alone (which amounts to 17,101 lines spread out over 36 files) made up about one-third of the code of the entire original Macintosh OS.

The Computer History Museum, in addition to hosting the source code for both MacPaint and QuickDraw, has provided a short history (with screenshots) of the programs, along with several anecdotes about the software. Creator Bill Atkinson describes the compiling of MacPaint as an "art form, like any other art form," and emphasizes the beauty of clean, simple code.

To read more about MacPaint's history or to download the source code, you can visit the Computer History Museum's Website. Andy Hertzfeld, who now runs Folklore, has several additional stories about the program, plus a gallery of MacPaint art made by former Macintosh interface designer Susan Kare.

MACPAINT DRAWINGS BY SUSAN KARE; IMAGES COURTESY OF APPLE

Time travel at the speed of a 1935 Speedster?

The 1930s brought unprecedented innovation in machine-age technology and materials. Industrial designers from the auto industry translated the principles of aerodynamics and streamlining into everyday objects like radios and toasters. It was also a decade when an unequaled variety of watch cases and movements came into being. In lieu of hands to tell time, one such complication, called a jumping mechanism, utilized numerals on a disc viewed through a window. With its striking resemblance to the dashboard gauges and radio dials of the decade, the jump hour watch was indeed "in tune" with the times!

The Stauer *1930s Dashtronic* deftly blends the modern functionality of a 21-jewel automatic movement and 3-ATM water resistance with the distinctive, retro look of a jumping display (not an actual jumping complication). The stainless steel 1 1/2" case is complemented with a black alligator-embossed leather band. The band is 9 1/2" long and will fit a 7–8 1/2" wrist.

True to Machine Art esthetics, the sleek brushed stainless steel case is clear on the back, allowing a peek at the inner workings.

Try the Stauer *1930s Dashtronic* Watch for 30 days and if you are not receiving compliments, please return the watch for a full refund of the purchase price. If you have an appreciation for classic design with precision accuracy, the *1930s Dashtronic* Watch is built for you. This watch is a limited edition, so please act quickly. Our last two limited edition watches are totally sold out!

Not Available in Stores

Stauer 1930s Dashtronic Watch
$99 +S&H *or* **3 easy credit card payments of $33** +S&H

Call now to take advantage of this limited offer.

1-800-859-1602

Promotional Code DRW577-02
Please mention this code when you call.

Stauer
Heritage of Art & Science

14101 Southcross Drive W.,
Dept. DRW577-02
Burnsville, Minnesota 55337
www.stauer.com

REVIEWS

Hardware, Software, and Accessories for Your Creative Endeavors

HARDWARE

Apogee GiO △

When Apple introduced stompbox effects and amps with GarageBand '09, some users complained that the inability to control virtual stompboxes as you played was a significant lapse. Guitarists routinely switch effects as they play, and having to take their hands off the instrument to click a virtual switch ruins the musical flow. Apogee has come up with a solution with its $395 GiO USB effects pedal-board controller. The GiO, in addition to acting as a way to trigger effects, is also a USB audio interface. The GiO works as advertised, is easy to set up, and is sturdy enough to stand up to even the most rigorous gigs (macworld.com/6534).

♦♦♦♦½; $395; Apogee Electronics, www.apogeedigital.com

SOFTWARE

iWeb Valet 2.3.9 △

iWeb '09 is a great way to create attractive Web pages quickly, but its drag-and-drop simplicity isn't for everyone. Some users long for the flexibility that only access to HTML code can bring; and others may appreciate iWeb's page-layout-like approach to Web design but still prefer to see a few more options in its toolbox. iWeb Valet 2.3.9, by ZiggySoft, aims to satisfy both camps by letting users customize their sites with features unavailable in iWeb, all without needing to edit a single line of HTML. Unfortunately, iWeb Valet is held back by a cumbersome workflow (macworld.com/6535).

♦♦♦; €19; ZiggySoft, www.ziggysoft.com

MemoryMiner 2.1.1 △

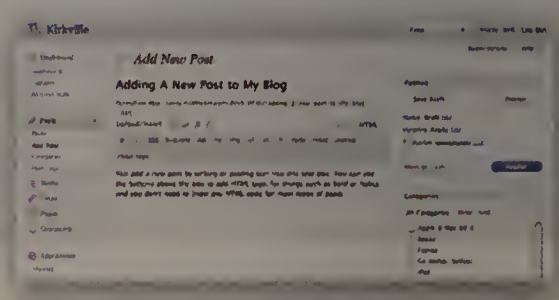
Last month's vacation photos can too easily become this month's blur of forgotten details. MemoryMiner 2.1.1 turns photo albums into narratives, tagging people and locations in order to preserve the stories of your life. While its interface needs refinement, the program largely fulfills its big ambitions. MemoryMiner 2.1.1's interface could stand a bit more polish. However, the program's most crucial features work magnificently (macworld.com/6536).

♦♦♦½; $40; GroupSmarts, www.memoryminer.com

WordPress 3.0 ▽

WordPress is an easy-to-use blogging platform for people who don't know HTML code, and version 3.0 adds many features that enhance the program and let users create more-complex sites with little work. If you do code, then you can do much more, not only in your themes and widgets, but also in your posts (macworld.com/6537).

♦♦♦♦; free; WordPress, www.wordpress.org



Top Products YOUR GUIDE TO THE BEST HARDWARE WE'VE TESTED

DVD BURNERS
Desktop and Portable

PRODUCT	RATING	PRICE[A]	TYPE	FIND CODE[B]
d2 DVD±RW w/LightScribe www.lacie.com	♦♦♦♦	$90	desktop	3900
MediaStation 8X External Blu-ray Writer (pictured) www.buffalotech.com	♦♦♦♦	$270	Blu-ray	5344

CAMCORDERS
High Definition

PRODUCT	RATING	PRICE[A]	TYPE	FIND CODE[B]
Flip MinoHD (120 Minutes) (pictured) www.theflip.com	♦♦♦♦½	$190	mini camcorder	5512
HDC-HS300 www.panasonic.com	♦♦♦♦	$1219	HDD/SD Card hybrid	6106

[A] All prices are the best current prices taken from a PriceGrabber survey of retailers at press time. [B] In a browser's address field, typing a find code after *macworld.com/* takes you to a product's review or overview.

mophie

Technically a battery.
Technically a case.

mophie juice pack air™ for iPhone 4

The juice pack air™ offers you the convenience of a fully protective hard-shell case with virtually twice the battery life of the iPhone alone; all in an ultra-thin, light-weight, low-profile design.

see more at **mophie.com**

Made for iPhone

Mac OS X Hints

The insider tips you won't get from Apple

BY WHITSON GORDON

Symbolic Links Made Simple

Symbolic links are similar to aliases, in that they are shortcuts that link to a specific file or folder. But symbolic links are often more useful than aliases. For example, if you put an alias in your Dropbox folder, the synchronizing service will sync just the alias file; but put a symbolic link in that folder, and Dropbox will sync the original file that the link points to. Also, symbolic links work in Mac OS X's Unix-based tools, including Terminal, whereas aliases don't.

Unfortunately, while the Finder makes it easy to create aliases (Control-click and select Make Alias), it doesn't have any such built-in tools for creating symbolic links (also called *sym links*). For that, you usually have to turn to Terminal. But there are workarounds that allow you to create sym links from within the OS X graphical user interface. Some of these methods rely on AppleScript. Some rely on third-party utilities such as the free SymbolicLinker (★★★★; macworld.com/6547). But one MacOSXHints.com reader came up with another way, using a shell script and Automator.

Start by opening Automator and selecting Service from the list of templates. Next, select Files or Folders from the Service Receives Selected drop-down menu and choose Finder.app from the In menu. Drag the Run Shell Script action from the Utilities section of the Actions library. Select As Arguments from the Pass Input menu.

Now type the script Create Sym Link (at left) into the Run Shell Script window, replacing any text that might be there already. (If you'd rather not do all that typing, you can go to macworld.com/6548 and copy and paste the script from there.) Once you've entered the script, drag the View Results action from the same library so that it follows the Run Shell Script action. Save the workflow (it should automatically be added to *youruserfolder*/Library/Services), giving it whatever name you want ('Create Sym Link,' for example).

That done, you'll be able to Control-click on a file in the Finder, then select your service from the Services submenu; a sym link (with the word *link* appended to the filename) should appear in the same folder as the original file.

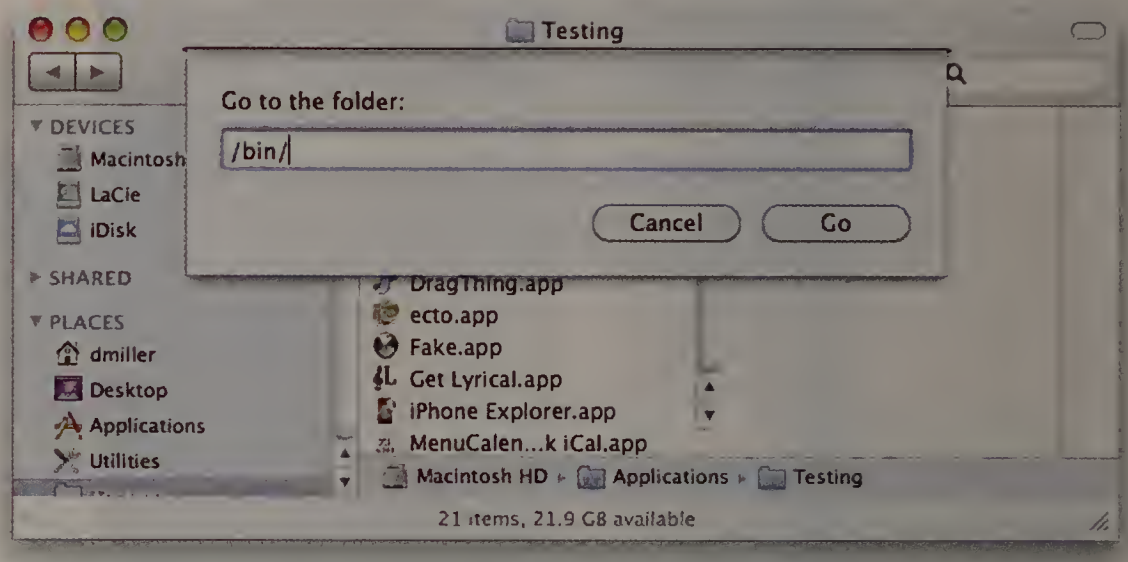
CREATE SYM LINK

```
for f in "$@"←
do←
  curFolder=`dirname "$f"`←
  linkFile=`basename "$f"`←
  fileSuffix="link"←
  fileExists=`ls -d "$f
$fileSuffix"`←
  fileNumber=0←

  until [ $fileExists=="" 
]; do←
    let fileNumber+=1←
    fileSuffix="link
$fileNumber"←
    fileExists=`ls -d "$f
$fileSuffix"`←
  done←

  echo "$f $fileSuffix"←
  ln -s "$f" "$f $fileSuffix"←
done
```

The return symbol (←) denotes the end of a line of code; you should press the Return key there.



Autocomplete Folder Names In the Finder's Go To Folder dialog box, type the first part of a folder's name and then press the Tab button to finish spelling out the folder's full name.

Autocomplete Folder Names

Drilling through a succession of nested folders and subfolders in the Finder to find the one file or folder you need can be slow and inefficient. If you know the name of the folder you want, you can use the Finder's Go ▸ Go To Folder command (⌘-Shift-G) to streamline that process.

What you may not know is that you don't even have to type in the full name of the folder you want: If you're manually entering a path in the Go To Folder dialog box, pressing Tab will autocom-

Tired of Dropped Calls?

Strengthen your signal with a signal booster from Wilson Electronics and expand your cellular coverage!

- on the road
- at home
- in the office

Sleek™

Available online:

RadioShack.com™ BEST BUY amazon.com. Buy.com

www.wilsonelectronics.com/macworld
866-203-5971

Wilson® Electronics, Inc.

plete the folder name (assuming you have entered enough information to make the choice unambiguous). For instance, entering **/b** and pressing Tab will autocomplete the name to **/bin/** (assuming you have no other folders beginning with **b** in the root folder).

This tip is especially useful for accessing hidden folders; even if the folder is hidden, it will show up in the Finder if you enter its name in the Go To Folder dialog box.

Error-Free Burning

While Time Machine makes backing up your Mac's hard drive simple, making occasional backups onto physical media is a good idea—to CDs or DVDs, which you can then store somewhere off-site for extra safety.

However, if you try to burn your user folder straight to disc in Mac OS X 10.6, you may get an error message. Specifically, you're likely to see the message "Could not open the data fork of <unable to get file path> (-43)," resulting in an unusable disc.

The source of the problem is the file com.apple.sidebarlists.plist, which is housed in the folder *youruserfolder*/Library/Preferences. OS X 10.6 issues that error message because it does not copy files to the burn folder before burning the disc; if the original file is still in use (as com.apple.sidebarlists.plist apparently is) while the burn is happening, you get an error. You'll get a similar error if you delete a file from its original location before the disc is finished burning, or if you don't have permission to access a file.

The solution is simple: Lock the file before burning (select File ▸ Get Info, and then put a checkmark next to Locked in the Info window). Just be sure to unlock it when you're finished.

Selective Exposé

By clicking and holding on a program's icon in the Dock, you enter Exposé's application mode, which lets you see all of the program's—and no other application's—open windows. This is similar to the way the regular Exposé shows you the frontmost windows of all your open apps.

But what if you want to view the windows of more than one application at a time, without viewing them for all your open applications? You can do so by ⌘-clicking the icon of another running application in the Dock. The open windows of both applications should now be visible in Exposé. You can ⌘-click on more applications and bring their windows into Exposé as well.

Remember that you can also remove a program's windows in Exposé, by ⌘-Option-clicking its Dock icon. Neither of these tricks will work on windows that are minimized or hidden.

Whitson Gordon is a contributing writer for Lifehacker.com.

Have a Hint to Share?

Navigate to MacOSXHints.com to submit it. This column was based on tips from Ido Adam, Aaron Meurer, Bogdan Popescu, and anonymous contributors. Each month, the author of our favorite tip receives the *Help Desk* mug.

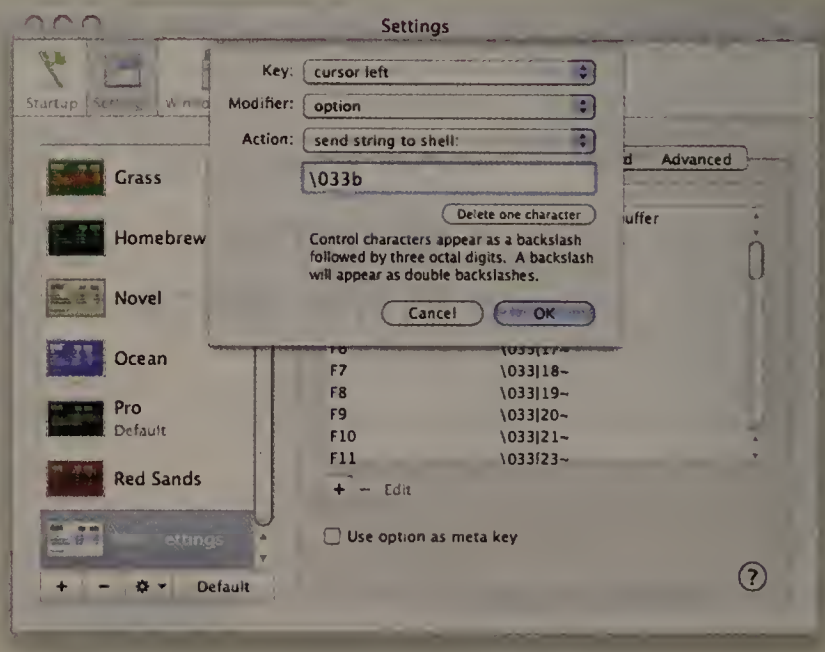
POWER TIP OF THE MONTH

Text Shortcuts in Terminal

Terminal may be useful, but it does have its annoying quirks. For example, there are lots of standard key combinations for moving the cursor—Option-Left Arrow, for example, for moving to the left one word at a time; and Option-Right Arrow, for going the other way—that don't work on the command line. But there is a way around the limitation.

Select Preferences ▸ Settings and choose the Keyboard tab. Click on the plus-sign (+) button at the bottom. Select Cursor Left or Cursor Right from the Key drop-down menu and Option from the Modifier list. In the text-entry box, type a single backslash (\); doing so will enter a double backslash (\\). Press the left arrow key and then the forward Delete key to delete one of those backslashes. Now follow the single slash with **33b** or **33f** to get **\033b** (Option-Left Arrow) or **\033f** (Option-Right Arrow).

(The reason this works: By default, OS X's bash shell uses Emacs keybindings; Escape-B and Escape-F are Emacs commands for word-left and word-right, respectively. And **\033** is the code for the Escape key.)



Terminal Shortcut Adding Escape characters to Terminal keyboard shortcuts requires a little trickery.

MUG PHOTOGRAPH BY PETER BELANGER; ICON BY PAUL HOWALT

Friends + Benefits

Join our exclusive Insider community for premium Macworld access and features

MACWORLD INSIDER is the ultimate way to experience Macworld.com. You get access to an ad-free site layout,[1] full-content RSS feeds, a members-only newsletter and forum, plus live chats with Macworld editors. You also get access to the Macworld digital magazine library, featuring PDFs of every issue for the last few years, all ready to download to your Mac and fully searchable via Spotlight.

Exclusive access to full content

Magazine back-issue library
Spotlight-searchable PDF downloads of every issue for the last few years

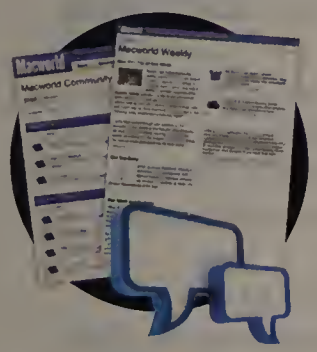
Full-text RSS feeds
Complete Macworld.com story content, right in your feed reader of choice

Streamlined access to Macworld.com

Ad-free site experience [1]
Special setting switches to custom ad-free page designs throughout the site

Single-page stories
Read longer items with ease—all stories appear on a single page.

Premium community features



- Exclusive Insider forum
- Custom avatar & user titles
- Live chats with writers & editors
- Members-only newsletter

Bonus discounts & deals

- Floor pass to Macworld 2011
- Discounts on Superguide books purchased on our site
- Special magazine subscription rate for either print or digital edition

Subscribe to Insider today at **macworld.com/insider**

and take advantage of our inaugural offer to current Macworld subscribers.

INAUGURAL OFFER
$19.95 12 months
CURRENT MAGAZINE SUBSCRIBERS

NEW MEMBERS
$39.95

Terms & Conditions apply. Visit http://www.macworld.com/insider for details.

[1] Members-only setting allows access to custom page designs that block most ads, including display, rich media, interstitial, and Google text ads. Ad blocking does not apply to ads for Macworld's products and services, in-video ads, or certain sponsorships and paid placements.

[2] Inaugural rate is $19.95/year for current or new magazine subscribers and $39.95/year for non-subscribers. Membership renews automatically until canceled and members must agree to the Macworld Insider Member Agreement.

Copyright © 2011 Mac Publishing, LLC. All rights reserved. Macworld, Macworld Insider and the Macworld and Macworld Insider logos are trademarks or registered trademarks of International Data Group, Inc. All other trademarks are the property of their respective owners.

Mac 911

Solutions to your most vexing Mac problems

BY CHRISTOPHER BREEN

Split GarageBand Project into Multiple Tracks

Q: I recently used GarageBand to record our church choir singing many songs. Trouble is, because I recorded all the songs at one time, GarageBand treats it as one very long song. How do I separate each song that the choir sang so that the CD I burn has each song on a separate track, like on a commercial CD?

Via the Internet

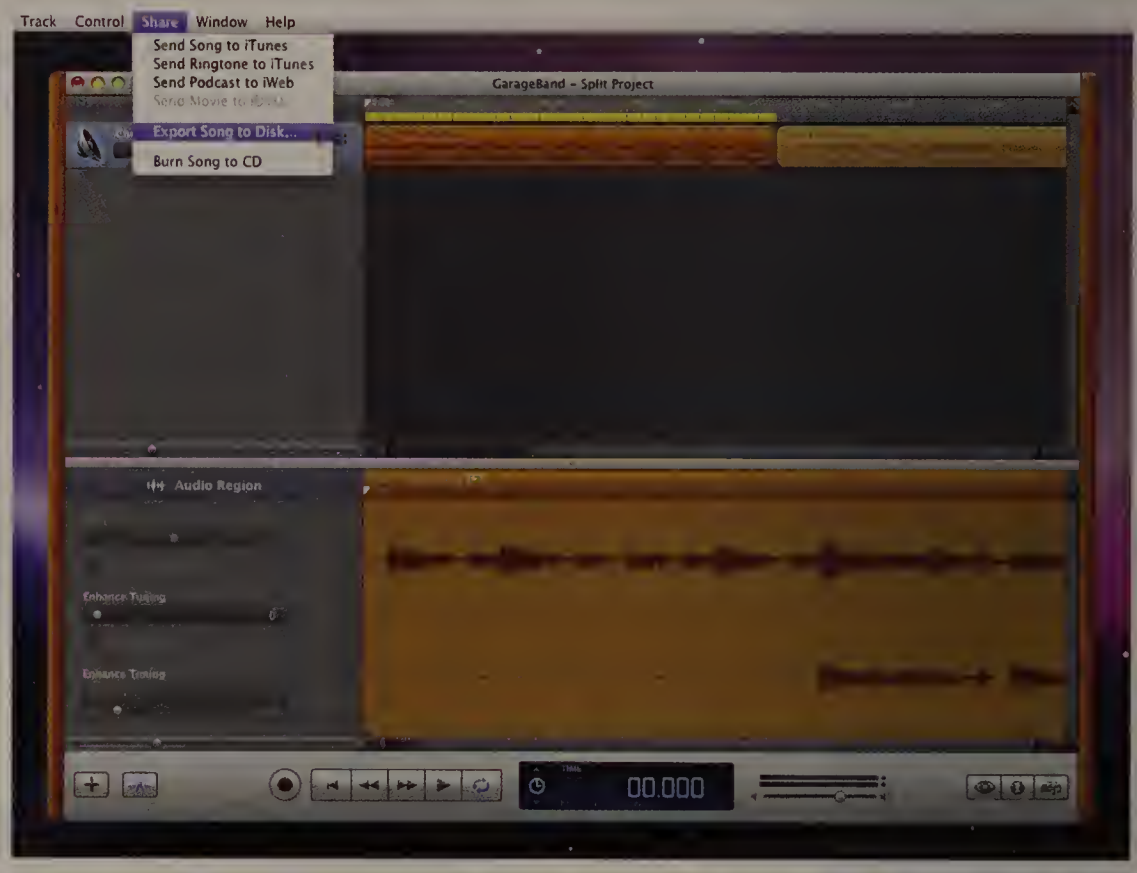
A: You can do this in GarageBand by placing the playhead between the first and second songs and pressing ⌘-T to split the track. Then click the Cycle button next to the Play button. A yellow bar will appear at the top of the timeline, starting at the beginning of the timeline. Drag the right side of the yellow bar to where you created the split. Now choose Share ▸ Export Song To Disk (see "Doing the Splits"). Repeat these steps for each song—moving the yellow bar to the beginning of the song and then stretching it to the end.

Frankly, though, I find this to be a bother. So much so, in fact, that I'd consider saving the GarageBand track as a single AIFF track and then opening that single track in a different application that handles this kind of thing with greater aplomb. To do that, choose Share ▸ Export Song To Disk. In the sheet that appears, make sure that the Compress option is not enabled and save the track to your desktop.

Download a copy of the free, open-source Audacity audio editor (audacity.sourceforge.net). Launch Audacity and choose Project ▸ Import Audio (⌘-I). Navigate to the track you saved from GarageBand and click Open. The track will open in Audacity's timeline.

Click the Selection tool (represented by the I-beam icon) in the top left corner of the Audacity window, and click at the very beginning of the track. Choose Project ▸ Add Label At Selection (⌘-B) to create a label (properly called a *marker*) at that point. Move to where the next break between tracks occurs and, with the Selection tool still active, click at this point. Add another label. Continue doing this until you've marked all the breaks.

Choose File ▸ Export Multiple. In the Export Multiple window that appears, make sure that the Split Files Based On Labels option is enabled. Choose a location for saving your files, and click the Export button. If asked for an audio format, choose WAV, as this creates audio files at their original fidelity. Audacity will now split your long track into separate songs based on where you placed the labels. You can now import those tracks to iTunes and burn them to disc.



Doing the Splits GarageBand offers a roundabout way to export songs within an individual track.

Have a Problem?

Go to the Mac 911 forum (macworld.com/2467) for help with your misbehaving Mac or applications.

Snow Leopard and a UPS

Q: I've connected my iMac to an APC XS 1500 uninterruptible power supply (UPS). I recently upgraded my iMac to Snow Leopard and found that I can't use APC's PowerChute utility to monitor the UPS because there's no Snow Leopard version. What do I do now?

Don Cooper

A: First, make sure that you've connected the USB cable from the back of the UPS to a USB port or hub on your Mac. Without that connection, your Mac won't know that it's attached to the UPS. Now launch System Preferences and select Energy Saver. You should see a UPS tab. Select it and you'll find options for configuring the UPS.

These options are similar to what you see when you select the Power tab in this system preference—computer and display sleep times, and options to put the hard drives to sleep and restart the Mac after a power failure. To view more-arcane options specific to the UPS, click the Shutdown Options button (see "UPS Power Options"). Here you can set limits on when to automatically shut down the computer running on UPS power. You have the options to shut it down after a specific amount of time (from 1 to 15 minutes), when a certain number of minutes remain in the battery's charge (again, from 1 to 15 minutes), and/or when the battery level reaches a particular percentage (from 1 to 100 percent).

If you need PowerChute features that aren't supported by Energy Saver (you want to turn off the low-battery beep, for example), APC suggests that you attach the UPS to a Windows PC or Mac running an older version of OS X, run PowerChute to do what needs doing, and then reattach it to your Mac running Snow Leopard.

Move a Mac Mini's AirPort Card

Q: I have two 1.25GHz Mac mini PowerPC G4 systems. The first is without a wireless card, and the second has such a card. I want to put the card from the second mini into the first one. What's the best approach?

Artur Sobieraj

A: The easiest solution is to purchase a Mac-compatible wireless USB adapter and use it with the Mac mini that lacks a wireless card. Unfortunately, not all such adapters work with Macs. Other World Computing (eshop.macsales.com) sells Mac-compatible wireless adapters.

If you decide to dive into the guts of your minis, you can swap the hard drive or move the AirPort card. I took a stroll over to iFixit.com to look at its Mac mini PowerPC repair guides (macworld.com/6545), and it appears that moving the AirPort card may be slightly easier than swapping the hard drives, but the latter operation isn't that much more difficult. Look at the instructions for each procedure and see which one seems more manageable.

If these upgrades are beyond your capabilities and you have an external FireWire hard drive, try this method: Clone the contents of mini number one's hard drive to the FireWire drive by using a tool such as Mike Bombich's Carbon Copy Cloner (payment requested; www.bombich.com). Then confirm that the external drive can boot mini number two and that it contains all your content. Now attach the two minis with a FireWire cable, boot mini number one by holding down the T key to boot into FireWire Target Disk Mode, and then boot mini number two.

When you do, mini number one's hard drive will appear as an external hard drive

ICONS BY PAUL HOWALT

Bugs & Fixes BY TED LANDAU

Apple TV Troubleshooting Tool Needs Improvement I turn on my Apple TV and all seems fine. Yet there are times when the Apple TV doesn't appear in iTunes' Devices list. This means that I can't make any changes to the synced data or to other settings accessed via iTunes. The only sure-fire solution that has worked for me is to break the connection between my Mac Pro and Apple TV. You can do this either from the Apple TV window in iTunes' Preferences or from the Apple TV itself. You then reestablish a new link and enter the passcode in iTunes when asked.

This almost always works, but doing it requires that all the synced data on the Apple TV be erased. The restore can take hours to complete, and, because there's no dedicated backup file (as there is with iOS devices), I may not wind up with an exact duplicate of what I had before. An Apple Discussion Forum thread (which you can find at macworld.com/6546) outlines the problem.

Recover Lost Contacts I sync my calendar and contacts data across my Mac and all my iOS devices using the MobileMe option. This usually works well, but when it doesn't, a disaster can result. Having discovered that my iPhone's contacts had somehow disappeared, I found that they were also missing in Address Book on my Mac, in the Contacts list on the MobileMe Website, and in my iOS devices' Contacts apps.

I'm not sure where the problem began, but what happened next is clear: Once the contacts were deleted at one location, MobileMe syncing took over and deleted all the contacts from every other device. In such an event, these are the options you have for restoring contacts to your Mac, MobileMe, and iOS devices.

> Restore from a Time Machine backup: Open Address Book and launch Time Machine. Go back in time until you see contacts in Address Book. Restore from this backup.

> Restore from an Address Book archive: From the Address Book application, go to the File menu and select Export ▶ Address Book Archive. This creates an archive file of your contacts. If needed, you can later use the Import command to reinstall the contacts from the saved file. This works only if you created the archive prior to the disaster.

> Restore from an iTunes backup file: The backup file for your iOS devices, as maintained via iTunes, contains the Contacts data. If you have not done a sync in iTunes since losing the data, you should be able to get it back via a restore. Control-click on the iOS device's name in the Devices section of iTunes. From the pop-up menu, select Restore From Backup, and navigate to the most recent backup.

Senior Contributor **Ted Landau** is the founder of MacFixIt (www.macfixit.com). Share your problems at bugs@macworld.com or on Macworld.com's Mac 911 forum.

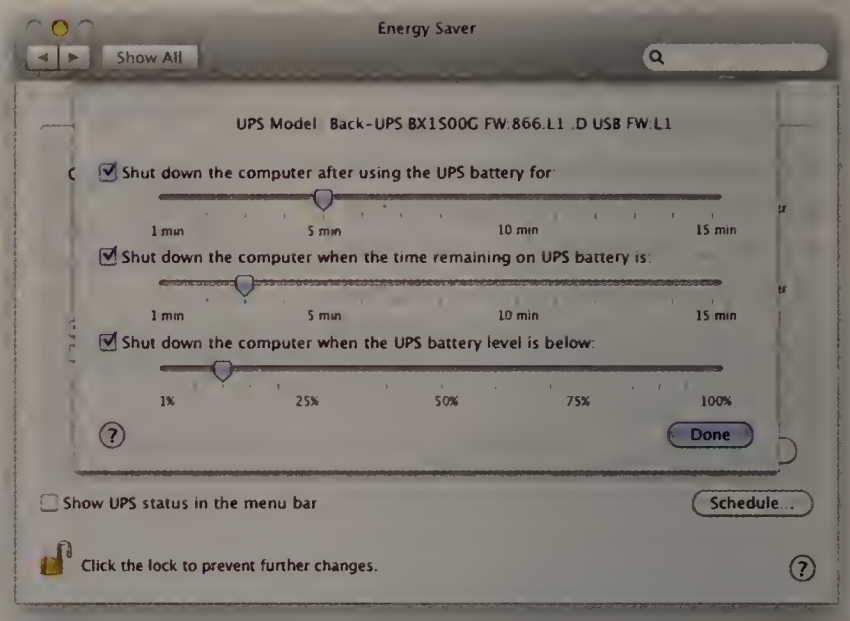
on mini number two's display. Using Carbon Copy Cloner, clone mini number two's hard drive to mini number one. You now have the contents of mini number two on both Macs. Finally, shut down both Macs, attach the external hard drive (which contains the contents of mini number one) to mini number two, boot from that drive, and clone its contents to mini number two.

Digitizing LPs Revisited

Q: Has anyone developed software that will enable me to use my Mac to record LPs and put them on audio CDs? I would like to be able to record an LP and select each song.

Rick Patterson

A: You can't make a direct connection between your turntable and Mac because of the turntable's *RIAA curve*—this curve reduces low frequencies and pushes higher frequencies. If you directly connect the turntable to your Mac, the sound will be unsatisfactory. Instead, you must channel the turntable's audio through a device that corrects the RIAA curve. That device could be something as simple as your stereo receiver. String an RCA-to-miniplug cable between an output on the receiver (Tape Out, for example), and everything should be fine.



UPS Power Options You can configure an attached UPS in Snow Leopard's Energy Saver system preference.

If your receiver doesn't have the inputs or outputs you need, consider a phono preamp. This device boosts the signal from the turntable to acceptable levels, and deals with the RIAA curve. Phono preamps run between $20 and $150.

You can use any audio editor to capture the sound from an attached turntable or tape deck—Apple's GarageBand will certainly do the job. Choose the audio input that delivers sound from your turntable, record a side of the LP, and then use the technique I described

These cases survived WWII; they'll protect your iStuff just fine.

iPad & iPhone cases from salvaged WWII materials. Only at TempleBags.com

△TEMPLE
BAG COMPANY

earlier to create separate tracks ("Split GarageBand Project into Multiple Tracks"). Better still is to automatically chunk your LPs into tracks. To do that you need an application that "listens" for audio gaps and creates new files based on these moments of silence.

If you have a copy of Roxio's $100 Toast Titanium (www.roxio.com), you already have such an application, in the form of the included CD Spin Doctor. Operation is pretty simple. Start the capture, drop the needle, play the side of the LP, and, when you click Stop in CD Spin Doctor, the application will identify gaps. If you agree with its decisions, choose the option to divide the file into separate tracks. If it missed the mark, you can adjust the track splits.

Note that while I've had good luck with the most recent version of CD Spin Doctor, I've found older versions to be unreliable. If you don't have the latest version and you're not keen to upgrade to Toast Titanium 10 to get it, you have other options.

One is Ambrosia Software's $69 WireTap Studio (www.ambrosiasw.com). Like CD Spin Doctor, it can listen for silence and automatically create files based on that silence. Alternatively, you can easily insert markers or create new tracks as the record plays.

Rogue Amoeba's $50 Audio Hijack Pro/Fission bundle (www.rogueamoeba.com) is another option. Fission is an easy-to-use audio editor that can automatically split files based on periods of silence. I like both WireTap Studio and Audio Hijack Pro/Fission a lot. Both will export files directly to iTunes, where you can then arrange the tracks into playlists and burn them to CD.

ICON BY PAUL HOWALT

MAC 101

Messy Menu Bar

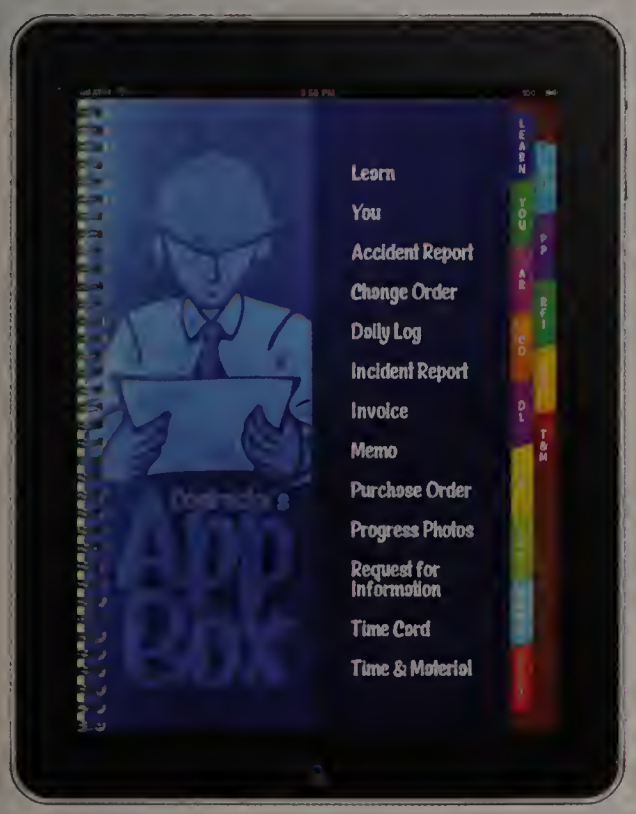
Q: I have a lot of icons in my Mac's menu bar and I'd like to rearrange their order. How do I do that?

Bill Waters

A: You can move Apple's menu-bar icons (all icons except the Spotlight icon, that is) simply by holding down the ⌘ key and dragging them to the right or left. You can't move icons from third-party utilities and applications, however. They appear in the order in which they were launched, with the icon from the most recently launched application or utility appearing on the left.

CD&V APPLICATIONS, LLC

Creating vocation specific applications for the iPad



Contractor's APP Box
Features the most commonly used forms in the construction industry.
Mobile contractors have the ability to complete their paperwork in the field for rapid distribution to their office, clients and consultants saving time and money while monitoring the project.

How it Works
The ability of the application to populate information from the iPad and autofill many of the fields on each form will save the user hours of data input weekly.
The e-mail button will automatically PDF each form, open the mail program and add the attachment.
There is no learning curve for this application. The simplicity and ease of use is exceptional.

Coming Soon
The Dietitian's App Box
Streamlining good health!

Custom Built Vocation Apps available upon request.

Available on the App Store

CD&V Applications, LLC 21602 Surveyor Circle, Huntington Beach, California 92646 714-743-9221 **vocationapps.com**

Other World Computing

Quality Products, Expert Support since 1988

More Memory = Faster Mac!

OWC Memory for Apple® Mac® Pro

2006/2007/2008
DDR2 FB-DIMM

- 4GB MATCHED SETS FROM $134.99
- 8GB MATCHED SETS FROM $267.99
- 16GB MATCHED SETS FROM $529.99
- 32GB MATCHED SETS FROM $1229.99

Nahalem/Westmere Xeon (2009 & 2010 Models)
DDR3 ECC

- 6GB MATCHED SETS FROM $189.99
- 8GB MATCHED SETS FROM $252.99
- 12GB MATCHED SETS FROM $377.99
- 16GB MATCHED SETS FROM $497.99
- 24GB MATCHED SETS FROM $859.99
- 32GB MATCHED SETS FROM $1129.99
- 48GB MATCHED SETS FROM $2129.99
- 64GB MATCHED SETS FROM $2799.99

Double the memory - ***64GB for 21% lower cost*** versus the factory maximum offered 32GB option.

Easy online Mac Pro Memory Guide
www.macsales.com/promemory

Memory for the iMac®, Mac® mini, MacBook®, & MacBook® Pro

Available Upgrades: Mac mini, MacBook, & MacBook Pro up to 8.0GB; iMac up to 16.0GB

4.0GB KITS FROM $99.97 **6.0GB** KITS FROM $172.99 **8.0GB** KITS FROM $229.99

NuRAM Special: 8GB from $179.99 *www.macsales.com/nuram*

Memory For Nearly Every Mac Ever Made *www.macsales.com/memory*

All OWC memory meets or exceeds manufacturer specifications for maximum quality assurance, but at the independent prices you can afford. Plus, you receive the industry-leading Lifetime Advance Replacement Warranty and award-winning US-based customer support

Why buy from OWC?

24/7 Live Chat support.

Extremely fast delivery at a reasonable cost.

FREE Shipping on all orders $179 and UP!

Accessories for Apple® iPad™

To view our full selection, please visit: ***www.macsales.com/ipad***

From the luxury of the iFolio™ to the simple snap-on protection of the NuGuard™ protective cases, gear up your iPad with the accessories you need and want!

iFolios FROM **$99**

iPad not included.

Accessories for iPad FROM **$9.99**

OWC Multi-Mounts

Converter Brackets: Add 2.5" drives to 3.5" bays & 3.5" drives to 5.25" bays

www.macsales.com/multi-mounts

Securely install smaller footprint (2.5" & 3.5") hard drives and SSDs into larger sized (3.5" & 5.25") drive bays in Mac Pro, Power Mac, and PC tower computers. Seven different adapter bracket kits offer the freedom to expand your computer's drive capacity and configuration to meet individual data storage and backup needs.

Brackets Available FROM **$17.99**

Drive available separately

OWC Data Doubler™

Optical to SATA hard drive converter bracket.

www.macsales.com/dd

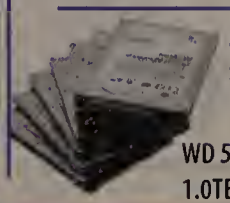
Optical bay mounting solution for adding up to an additional 1.0TB of internal storage. Add a Solid State Drive (SSD) for near instantaneous boot and app load. Even create a RAID array! Includes bracket, 5 piece toolkit, screws, and detailed installation guide for a complete kit.

For use with MacBook and MacBook Pro.

ONLY **$79.99**

Drive available separately. Data Doubler installs completely inside notebook, and is not visible externally

Save with Bundled SSD Kits!



2.5" LAPTOP DRIVES

Serial ATA, IDE/ATA from 20GB up to **1.0TB**

	Hitachi 5400RPM	Seagate 7200RPM
WD 5200RPM	500GB $69.99	500GB $89.99
1.0TB $187.99	320GB $57.99	320GB $67.99

3.5" DESKTOP DRIVES

Serial ATA, IDE/ATA from 80GB to **2.0TB**

- 1.0TB 7200RPM NOW FROM $59.99
- 2.0TB Highest capacity FROM $119.99
- 250GB 7200RPM FROM $39.99

School/Corporate Purchase Orders accepted with approved credit.

DISCOVER · American Express · MasterCard · VISA · JCB · PayPal · amazon payments

SPECIAL ADDITIONAL SAVINGS!
Competitive Pricing + Additional Cash Back!
See offers at www.macsales.com/Rebates

MY OWC UPGRADE CENTER
Find what you need!
www.macsales.com/MyOWC

Visit: **www.macsales.com** *Call:* **800.275.4576 | 815.338.8685**

High Capacity External Storage

800.275.4576 | 815.338.8685
www.macsales.com

Available with FireWire 800,
FireWire 400, USB 2.0, and/or eSATA
www.macsales.com/firewire

USB eSATA

OWC Mercury Elite-AL Pro
Up to 2.0TB of ultimate solution for any data storage need from **$84.99**

NewerTech Guardian MAXimus & NEW! Guardian MAXimus mini
Provides "live activity" backup/data redundancy of your critical data with Plug-and-Play simplicity on any Mac or PC from **$189.99**

OWC Mercury Elite-AL Pro QX2
Up to 8.0TB "Quad Interface" 4-bay Enterprise Class performance RAID storage solution from **$499.99**

Powerful Portables

USB eSATA

Whether you need a pocket-sized, RAID ready, or "Quad Interface" solution, OWC has bus-powered, high-performance portable drives with up to 1.5TB of storage.

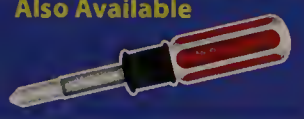
OWC Mercury On-The-Go Pro & Mercury Elite-AL Pro mini
Up to 1.5TB of high performance storage with bus-powered, fanless convenience from **$59.99**

Accessories for Apple® iPhone 3GS/4
www.macsales.com/iPhone3
www.macsales.com/iPhone4

Free lifetime U.S. based technical support.

FREE! OWC Install Videos
How To Videos On Installing:
Memory, Optical, Drives, & More!
www.macsales.com/installvideos

Also Available



Expert installation services with fast turnaround.

Do-It-Yourself Kits

Everything you need to install a new drive and make an external from the original
www.macsales.com/laptopdiy

Two Upgrades In One!
250GB to 1.0TB
from **$59.99**

MOST POPULAR
500GB 7200RPM $99.00

- Turn your existing drive into a bus powered portable for easy data transfer & continued use.
- Complete kits with drive, enclosure, & 5 piece tool set.

Solid State Drive (SSD) Kits Also Available!
Get one of the fastest Internal SATA 2.5" SSDs available in an easy to assemble external Kit!

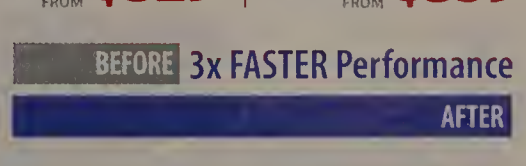
40GB KIT ONLY $114.99 | 60GB KIT ONLY $164.99
120GB KIT ONLY $309.99 | 240GB KIT ONLY $614.99

www.macsales.com/esataimac

Have OWC make your iMac even better.

High-Performance, High Capacity eSATA Solution!	40% Faster Than Factory Offered SSD Option!	Ultimate Performance Inside and Out!
Add an External eSATA Port FROM **$169**	Add an Internal OWC SSD FROM **$329**	Add a Bundle eSATA & SSD FROM **$359**

2010 Apple iMac 27" eligible upgrade models:
- 3.2GHz Intel Core i3
- 3.6GHz Intel Core i5
- 2.8GHz Quad-Core Intel Core i5
- 2.93GHz Quad-Core Intel Core i7



*Prices include cost of Ground Delivery to any location within the contiguous USA. Additional options including Overnight, 2nd Day Air, and for destinations outside the contiguous USA subject to additional fee cost

NuPower®

High Capacity Notebook Replacement Batteries

www.macsales.com/newertech
Batteries for MacBook®/MacBook Pro!
Plus batteries for all PowerBook® and iBook®

Up to 68% Higher Capacity vs. original Apple factory included battery.

FROM **$69**

Upgrade Your SuperDrive® & Add Blu-ray!

Why you may need to upgrade your SuperDrive:
- Get additional capabilities you current drive doesn't offer
- The internal drive is slow. Average notebook internal optical speed is 8X.
- The internal drive only reads discs & doesn't offer write functionality.
- The existing CD/DVD drive is not operating correctly

External and Internal Drives Available

Upgrade Your SuperDrive
FROM **$27.99**

Add Blu-ray Capability
FROM **$99.97**

www.macsales.com/superdrives

BBB ACCREDITED BUSINESS A+

At OWC Our Customers Come 1st!

QUALITY PRODUCTS | COMPETITIVE PRICES | EXPERT SUPPORT

Now with 'Green' Power!
Green, Sustainable, 100% On-Site Wind Powered
http://www.macsales.com/green

OWC, NewerTech and the NewerTech arrow (n>) logo are registered trademarks of New Concepts Development Corporation. The OWC logo and Other World Computing are trademarks of New Concepts Development Corporation. All rights reserved. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice. VOYAGER trademark used under a license from the owner of U.S. Registration No. 3,089,301 All rights reserved.

ADVERTISERS INDEX

Interact with the companies whose products and services are advertised in Macworld.

ADVERTISER	INTERACT	PAGE NO.
1&1 Internet	1and1.com	75
3 Cats and a Mouse	3caam.com	104
Adorama	adorama.com	83
APC	apc.com	25
Barracuda Partners LLC	intelli-diet.com	39
Biomorph Interactive	biomorph.com	104
Booq LLC.	booq.com	33
Bose Corporation	bose.com	67
Bowers & Wilkins	bowers-wilkins.com/zeppelinmini	57
Cablejive	cablejive.com	104
Carbonite	carbonite.com	85
CD&V Applications	vocationapps.com	99
Chillingo	chillingo.com	31
Circus Ponies Software, Inc.	circusponies.com	61
Citrix Systems	gotomeeting.com	6
Code-Monkeys	code-monkeys.com	39
Creative Juices	bigposters.com	105
DriveSavers Data Recovery Inc.	drivesavers.com	105
ESET	eset.com	C2-1
ESS Data Recovery	datarecovery.com	107
Ford	fordvehicles.com	19, 21
Fujitsu	us.fujitsu.com/macworld	5
G-Technology	g-technology.com	51
Gary Fong, Inc.	garyfonginc.com/mw	39
Gendai Games	gamesalad.com	37
Hyperbolic Software	hyperbolicsoftware.com	9
IGG Software	ibank3.com	12
Inkfarm.com	inkfarm.com	105
Insight Cruises	insightcruises.com/mac-11	8, 106
JS	weirdla.ws/macworld	34
Just Mobile, Ltd.	just-mobile.com	16
Kinekt Design	kinektdesign.com	104
Mac of All Trades	macofalltrades.com	105
Macessity	macessity.com	103
MegaMacs	megamacs.com	106
Micromat	micromat.com	13
Microsoft	officeformac.com/freetheideas	C4
Newspaper Direct	pressreader.com	34
OtherWorldComputing	macsales.com	C3, 100-101
Peavey	peavey.com/ampkitlink	35
Prosoft Engineering	prosoftengineering.com	63
Psiapps Inc.	psiappsinc.com	39
RadioShack	radioshack.com/tradeandsave	2
Rain Design	raindesigninc.com	104
Ramjet	ramjet.com	105
Realm	scosche.com	77
Ripples Group Ltd	ultra-case.com	73
Rosetta Stone	rosettastone.com	42
Sanho Corp	hypermac.com	15
Santom Ltd. - Dexim	dexim.net	41
SeafoodByNet.com	seafoodbynet.com	107
Sedna GmbH	sedna-presenter.com	103
Smile	smilesoftware.com	17
SpectorSoft	spectorsoft.com	71
Stauer	stauer.com	89
Sumo Lounge.	sumolounge.com	105
Temple Bag Company	templebags.com	98
The Neat Company	neatco.com	53
Wilson Electronics	wilsonelectronics.com/macworld	93
Wondershare	wondershare.com/mac	81
XFX	aviiq.com	55
Zco	zco.com	43
Zoo Printing	zooprintingtrade.com	107

November 2010, Volume 27, Number 11 Macworld (ISSN 0741-8647) is published monthly by Mac Publishing, L.L.C. Editorial and business offices: 501 2nd St. 6th Flr. , San Francisco, CA 94107, 415/243-0505. Subscription orders and inquiries should be directed to 515/243-3273. Subscription rates are $34.97 for 12 issues, $59.97 for 24 issues, and $79.97 for 36 issues. Foreign orders must be prepaid in U.S. funds. Add $10 per year for postage for Canada; add $25 per year for air freight for all other countries. Canadian GST Registration #868421876. Periodicals postage paid at San Francisco, California, and at additional mailing offices. Canada Post Publications Mail Agreement No. 40612608. Return undeliverable Canadian addresses to: Bleuchip Intl., P.O. Box 25542, London, ON N6C 6B2. Postmaster: Send address changes to Macworld, Subscription Dept., P.O. Box 37781, Boone, IA 50037-0781. Printed in the U.S.A.

~sedna presenter®

Digital Signage for Mac

New Version 2.7.2
Presenter Toolbox
& Scheduler Plus!

Publish your content to 1000s of screens & create perfectly synchronized video walls of any size.

Powerful new applications!

Presenter Toolbox
- For installation and administration of a large number of Presenter Player Macs – take full control!

Presenter Scheduler Plus
- Featuring Campaign Generator and Auto Scheduling of content and playlists – automate it!

Presenter Player for iPad
Out now!

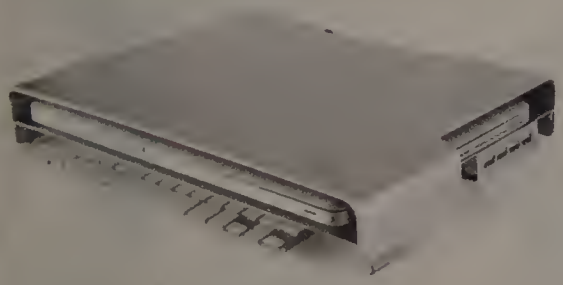
Scales to any size – priced to fit any budget

* starting at $295 for a playout license

- create and manage dynamic content
- create playlists and schedules
- distribute content easily to all players

www.sedna-presenter.com Exclusive distribution for North America: www.activatethespace.com activatethespace Professional AV Products and Solutions

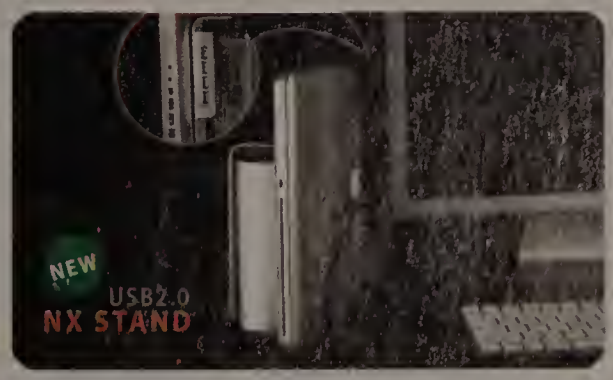
LAPTUK PRO
TWO COMPARTMENTS WITH USB2.0



MX4 V2
MAC MIN RACK MOUNT

Mi Classic
WITH 4 PORT USB2.0
DESIGNED FOR 2010 MAC MINI

ALL NEW
Mi 360
THE FIRST ROTATING MOUNT
FOR 2010 MAC MINI



ONLY BY **MACESSITY.COM**

iGo $333

i360° $39.90

mStand $49.90

cnet Editors' rating Very good

iWoofer $119

iLap from $49.90

www.raindesigninc.com 1 800 797 7321 rain

duraSync

The strongest iPod®, iPhone™, and iPad™ sync cable on the planet. You'll never buy another, guaranteed.

10% off code: mw1245 (expires Nov 30)

CableJive www.cablejive.com

Brilliant recipe management

A Cook's Books RECIPE MANAGEMENT

Try the demo: www.3caam.com

WITH MOTION IN MIND

Visit our website to see the gears in action KINEKTDESIGN.COM

Superior Quality Mac Memory

Lifetime Warranty

Ramjet

Same Day Shipping
1-800-831-4569
Mon-Fri 9am-6pmCST

Memory Upgrades

iMac Intel DDR3

4GB - $109.99
8GB - $249.99
16GB- $495.99

Mac Pro DDR3

4GB - $ 138.99
8GB - $ 269.99
16GB - $ 529.99
32GB - $1375.99

MacBook DDR3

4GB - $109.99
6GB - $189.99
8GB - $249.99

MacBook Pro DDR3

4GB - $109.99
6GB - $189.99
8GB - $249.99

Firewire Hard Drives

750G - $159.99
1TB - $169.99
1.5TB- $199.99
2TB - $249.99

Internal Hard Drives

500G - $ 54.99
1TB - $ 89.99
1.5TB - $109.99
2TB - $139.99

Speak to a Memory Expert

Secure Online Ordering at
WWW.RAMJET.COM
Prices subject to change without notice

1-800-831-4569

Professional, Fast, Dependable

sumo

BEAN BAGS 2.0
www.sumolounge.com
Urban Lounge Gear

BIG COLOR POSTERS | BANNERS | CANVAS | MOUNTING | LAMINATION

BIGPOSTERS.com
at HUGE DISCOUNTS

2' x 3' Color Poster $25

18" x 24" Archival Canvas $24

SPECIAL OFFER
RETRACTABLE BANNER STAND
$125 33" x 78" Banner Stand Includes Graphic & Nylon Case
Retails for over $350
Use Promotion code: MACWORLD

Sizes up to 60"x100ft | High Resolution | Color Accurate
Various media: Paper, Canvas, Vinyl, Fabric, Backlit & more

888-880-HUGE

Creative Juices Printing & Graphics | 96 Gazza Blvd Farmingdale | NY 11735 | tel. 631.249 2211 | www.bigposters.com

No Minimums | No Voicemail - We Answer our Phones 9am-5pm | Fast Turnaround

Mac of All Trades
Your solution for buying and selling used Macs

Serving Individual And Volume Buyers And Sellers

Volume Discounts Available

Apple Certified & Trained Technicians On Staff

www.macofalltrades.com
PayPal
Serving the Apple® community since 1995
BBB

NEW LOW PRICE!

$6.99 (Wow!) Qty 3+
Qty 2: $7.99
Qty 1: $8.99
Remanufactured HP 51645a (No. 45) ink cartridge.

More great deals at...
1-800-INKFARM
inkfarm.com
the ink & toner supersite.™

DRIVESAVERS®
DATA RECOVERY

We can save it!®
Want proof? www.drivesavers.com 800.440.1904

MEGA MACS.com

Your Source for MegaMac Deals since 1995

See this ad at
www.MegaMacs.com/MacWorld

BBB ACCREDITED BUSINESS

918.664.MEGA (6342)
Hours 9am-6pm (CST)
Email:
Sales@MegaMacs.com

AppleCare Protection Plan

iPhone	$54 Save $15
iPod Shuffle/Nano	$14 Save $25
Apple TV	$29 Save $20
MacBook/Air/iBook	$229 Save $20
MacMini	$109 Save $40

Snow Leopard Sgl~/Fam
$19/$49
Save $10/$14!*

iWork '09 Single~/Family
$39/$79
Save $40/$30!*

10.6 Mac Box Set~
$89
Save $80!*

MobileMe Single/Family
$59/$79
Save $40/$70!*

Snow Leopard Server~
$279
Save $220*

iLife '09 Single~/Family
$39/$84
Save $40/$15!*

Aperture 3
$149
Save $50!*

Logic Studio Full/Upg
$419/179
Save $80/20!^

Quicken Essentials 2010
$39
Save $10!^

FileMaker Pro 11
$229
Save $70!^

Parallels Desktop 5
$49
Save $30!^

Final Cut Studio 3 Full/Upg
$779/$259
Save $220/$40!*

MYOB Checkout
$289
Save $110!*

MYOB AccountEdge 2009
$179
Save $120!^

Office 2008 Business Full ~
$209
Save $190^

Office 2008 Media Full/Upg ~
$169/$99
Save $340/$200!^
Home and Student Edition: $119

Included with Purchase of any G4 or faster Mac*

Adobe Photoshop Elements 8	StuffIt Deluxe 2010 Mac
HOYLE Card Games 2010	TuneUp
HOYLE Puzzle and Board Games 2010	Virtual Box 2

*Must add bundle to cart at time of purchase

iMacs

24" 2.4GhzC2D|2GB|320GB|SD+ $989
20" 2.6GhzC2D|2GB|320GB|SD+ $929

MacBooks & MacBook Pros

13" MacBooks Starting at+ $469!
15.4" MacBook Pros Starting at+ $869!

Apple MagSafe Laptop Adapters

- MacBook Air 45 Watt. $59 Save $20*
- MacBook 60 Watt Used. $49 Save $30*
- MacBook Pro 85 Watt Used. $44 Save $35*

We Buy Excess Stock!

Monthly MegaDeals!

HP C4599 Wireless/USB AIO Printer
$59 Save $70!^

Apple 23" Cinema HD Display (DVI)~
$389

We fix iPhones!
3G/3GS Screen Repair
Only $75!
Other Repairs available

Other Products

Apple In-Ear Headphones	$59
Jawbone Prime Headset	$59
LSI7202 Fibre Channel Card	$69
LSI7202XP Fibre Channel Card+	$99
Apple Quad 4gb Fibre Card	$779
Radeon 9600 64MB Card+	$139
Vonage UIP1869V VOIP Phone	$49
MacBook Air USB SuperDrive+	$64

Legacy Products

OS X 10.5 Leopard Sgl/Fam	$249/$259
OS X 10.4 Tiger Server 10U	$229
Apple Wireless Remote	$19
Drive Genius 2.1.1	$49
Wired Mighty Mouse	$29
Wireless Keyboard (White)	$89
G4/G3 Laptop AC Adapter	$29/$24
G4 Auto/Air DC Adapter	$39
iLife '08 Sgl~/Fam	$19/$69
iWork '08 Sgl/Fam	$34/$69
Logic Express 8 Upg/Full	$64/$134
Office 2004 Pro	$74
FileMaker Pro 10~	$165

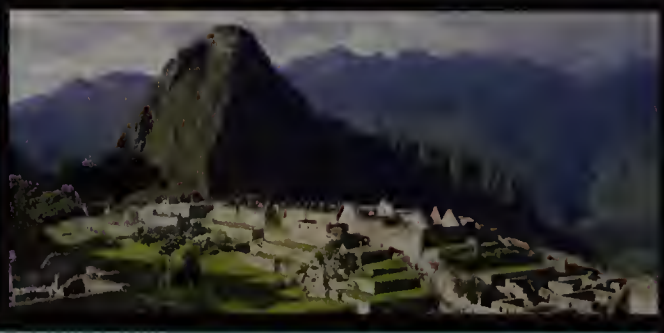
Prices Rounded Down & Subject to change. ^ = Savings compared to MSRP *= Savings compared to Apple.com ~= OEM += Pre-Owned

MacMania 11

InSightCruises.com/Mac-11

Welcome to MacMania 11, visiting Patagonia (South America) February 4 -16, 2011. We sail Buenos Aires, Argentina to Santiago, Chile with visits to the Falkland Islands, Ushuaia, Tierra del Fuego, Antarctica if you wish, and the Chilean fjords. Before we sail you may visit Iguazu Falls and after our cruise consider taking a 3-day trip to Machu Picchu.

IGUAZU FALLS & MACHU PICCHU



For a full listing of seminars visit
InSightCruises.com/Mac11-seminars

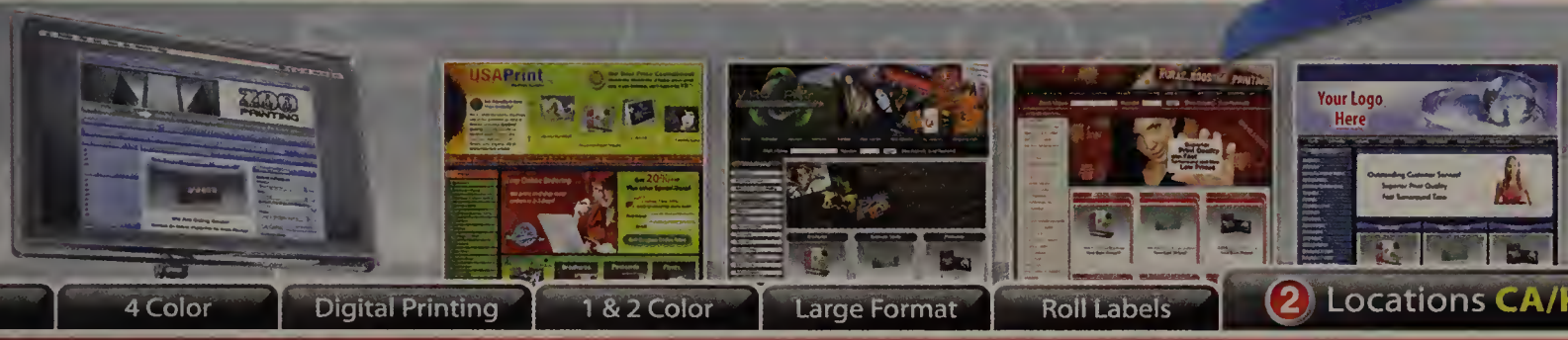
Speakers Include
• Dan Lyons (aka Fake Steve) • Leo Laporte
• Sal Soghoian • Don McAllister

CO-PRODUCED BY: Insight Cruises THE JOURNEY WITHIN Macworld

CST# 2065380-40

ZOO PRINTING
www.zooprinting.com

Get your PRINTING
Branded Website
Today!



Home | 4 Color | Digital Printing | 1 & 2 Color | Large Format | Roll Labels | 2 Locations CA/KY

What your business needs NOW for Image, Growth & Profit!

Image - Remember, image is everything. You must have a strong, seamless web-to-print solution to be competitive in today's market.

Growth - Attract new business with your new online presence. Expand your local and national clientbase.

Profit - Maximize your income by becoming more efficient. Saving money is making money.

For more information about **Branded Website** Visit us at: **www.zooprinting.com/website**

1000 BUSINESS CARDS
14pt. 4/4 w/ UV1 or UV2 $10.93
2-3 Day Turnaround

1000 4x6 POSTCARDS
14pt. 4/4 w/ UV1 or UV2 $33
2-3 Day Turnaround

1000 8.5 x 11 BROCHURES
100# Gloss Book 4/4 with AQ $90.48
Folding Additional
2-3 Day Turnaround

VINYL BANNERS
Starting At: $1.50 SQ FT
As Low As: 95¢ SQ FT

New ROLL LABELS
- Low Pricing
- Multiple Shapes and Sizes
- Gloss or Matte Lamination
- Indoor and Outdoor Use
- Digital Quality
- Short Run Available

New 1 & 2 COLOR
- Brochures / Flyers
- Business Cards
- Envelopes
- Letterheads
- NCR Forms
- Note Pads
- Small Flyers

Must Qualify as a Trade Printer To Receive These Prices.

Come See Us at Graph Expo 2010 ~ Chicago, IL ~ Oct. 3rd - 6th ~ Booth #4456

SeafoodByNet.com
Fresh from the sea to your doorstep!

The best in FRESH, hand selected seafood and Certified Aged Angus Beef. Call 815.337.4028 or visit www.SeafoodByNet.com to order.

Sign up for our **FREE** Fresh Club Newsletter for latest **DEALS** on your favorites!

Macworld Connect

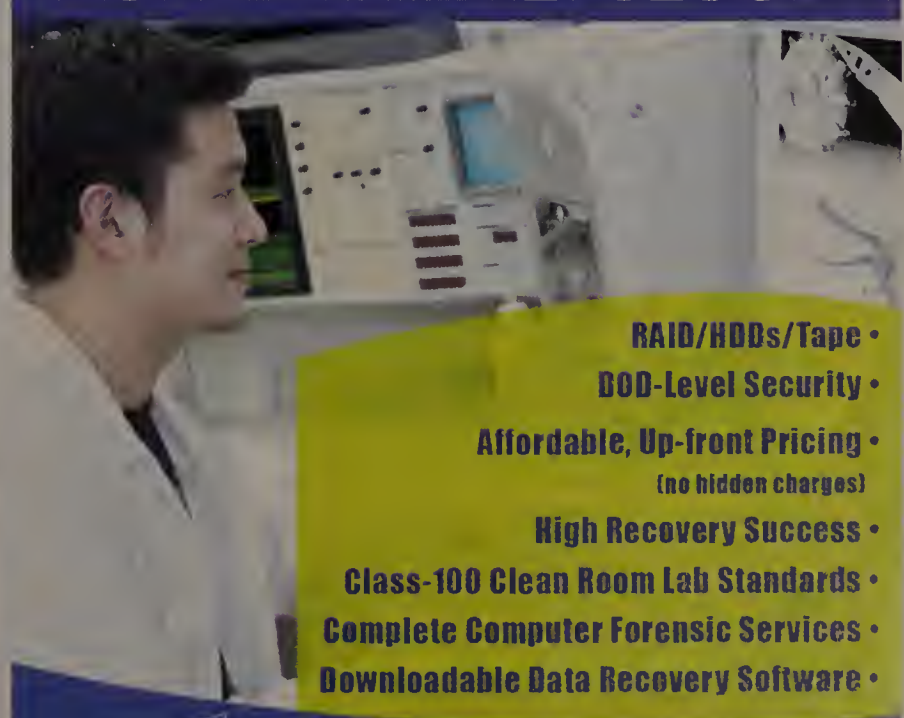
We want to hear what you have to say.

Please join us in the Macworld Member Panel. You'll partake in exclusive member surveys and receive access to special offers, contests and events.

www.MacworldConnect.com

CLEAN-ROOM DATA RECOVERY

FAST. RELIABLE. SECURE.



- RAID/HDDs/Tape •
- DOD-Level Security •
- Affordable, Up-front Pricing • (no hidden charges)
- High Recovery Success •
- Class-100 Clean Room Lab Standards •
- Complete Computer Forensic Services •
- Downloadable Data Recovery Software •

datarecovery.com
ESS DATA RECOVERY LABS
800.237.4200

USA: 110 N Research Drive, Edwardsville, Illinois | 1241 Quarry Lane, Pleasanton, California
6043 Hudson Road, Woodbury, Minnesota CANADA: 7300 Warden Ave., Toronto, Ontario

 By Andy Ihnatko

The File Is Not the Song

Why can't the Finder be more like iTunes?

A while back (*Spotlight*, December 2009), I wrote about the Finder and why I think it's ripe for revolution or even outright replacement. My point then: OS X's file manager still uses the same basic mechanisms and metaphors—dragging and dropping, files and folders—it used in System 1.0.

Since I wrote that column, I've spent months using a sophisticated computer that couldn't care less about files, folders, or any of that. That computer is the iPad, and the experience has made me think I didn't go far enough in that last column. Why just *change* the Finder? Why not do away with the file system altogether? The volumes-filled-with-folders-and-files metaphor seems like a quaint antique. I'm ready for a world in which files and folders are irrelevant, and our information resides in managed libraries instead.

Satellite's Gone

Do you know where your copy of Lou Reed's "Satellite of Love" is? Chances are you don't think of it as an MP3 file buried deep in a /Music/Lou Reed/Transformer subfolder. Rather, I suspect you think of it as a piece of music that can appear in many different contexts.

You can listen to it as a stand-alone song. Or you can hear it as the middle track of the *Transformer* album. Or you can think of it as a 220-second chunk of your three-hour Peaceful Music playlist or (more likely) as part of several playlists simultaneously. With the iTunes library, it doesn't matter where the track's file resides; what matters is that the music itself appears wherever and whenever you want it to.

More importantly, that MP3 file is massively tagged with information; those tags tell iTunes about the song and how I've used it in the past. They are what enables iTunes to assemble, say, an hour of music containing slow-tempo rock songs recorded in the 1970s, giving special weight to music I haven't heard in the past month and omitting songs I've played fewer than five times. The Finder wouldn't know where to begin with a request like that.

It's much the same with iPhoto. To iPhoto, a picture isn't a static JPEG file in your Pictures folder. Instead, it's the picture data you initially moved into the library, plus a record of every change you've made to it since.

A single photo can be a vacation shot of your family in front of the Statue of Liberty and (with some cropping) some patriotic clip art for a Keynote presentation. The same content is available in two different ways for two different purposes. You don't lose one version when you use the other.

iPhoto also tries to understand the relationships between images in your library. For example, it will tell you that it thinks the guy in this photo is the same as the guy in these 72 others, and would you like to tag all of them **Uncle Bonfiglio**? And, like iTunes, it will then use such information to let you create a photo album of, say, every Christmas photo in which your uncle *and* your dog appear.

The more I think of it, the more quaint a strict system of files and folders seems. And I don't like quaint.

PHOTOGRAPH BY PETER BELANGER

A Smarter Way

Imagine how much easier your life would be if the operating system could organize all of your data in the same abstracted fashion. Or, rather, think about how much easier *my* life would be.

For example, because electrons are usually cheaper to mail than paper, the print edition of this column needs to be several hundred words shorter than the online version. Do I really have to create two separate copies? Couldn't the OS understand that this is one column with two different versions?

The OS should care more about how I use the information than it does about where that information is stored. With an operating system like that, I could build documents the same way I build playlists. This single piece of text could appear online, in print, or as part of an introduction to a book that I'll write someday. When it came time to promote that book with a series of lectures, I could easily reassemble the book's best bits as Keynote slides.

The more I think of it, the more quaint the Finder's strict system of files and folders seems. And I don't like quaint. Ever been to one of those little tourist villages where people in Colonial garb dip candles and sew quilts and churn butter and complain about King George and his Stamp Acts? I have—and I hated every minute of it. I couldn't wait to get back to the future then. I'm impatient to get to the future of the Mac OS now.

Andy Ihnatko is a longtime *Macworld* contributor and the tech columnist for the *Chicago Sun-Times*.

Don't Call It An Upgrade.

Transforming. Revolutionary. Extraordinary.

Those may be just a few of the words you'll use to describe the OWC Mercury Extreme Pro SSD after experiencing its extreme speed boosting performance.

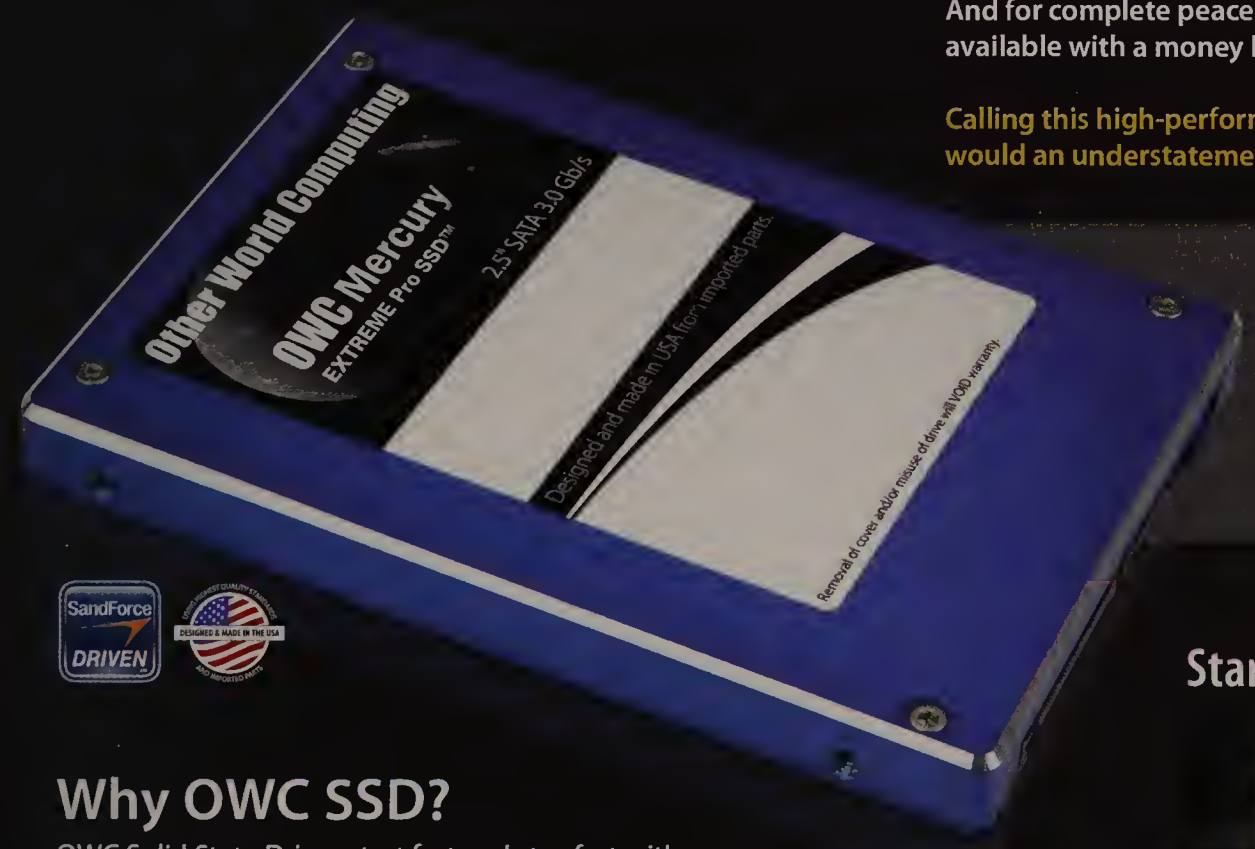
Whether your Mac is brand new, or a few years old, an OWC SSD makes everything faster. From starting up to loading apps to browsing the web...often in a blink of an eye.

It even makes older Macs faster than the latest hard drive based models. But speed doesn't mean a thing if it isn't reliable.

With no moving parts for silent, cool operation and up to 100x higher reliability than traditional hard drives, this "supercharger" offers the confidence you want.

And for complete peace of mind, it's the first and only SSD available with a money back guarantee.

Calling this high-performance difference maker a mere upgrade would an understatement.



40GB to 480GB from $99.99

Get your SSD today or learn more @ www.macsales.com/ssd

SandForce DRIVEN

DESIGNED & MADE IN THE USA AND IMPORTED PARTS

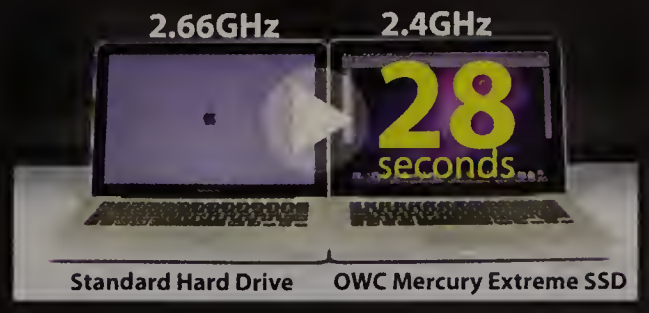
Why OWC SSD?

OWC Solid State Drives start fast and stay fast with usage unlike other brands whose SSDs slow down with usage.

What is an SSD?

SSD stands for "Solid State Drive" which use memory chips for data storage instead of a spinning optical platter used in standard hard drives. Memory chips offer much faster performance, ruggedness, and reliability.

Start up and open Adobe CS5 Suite



Seeing is believing: *Check out our series of videos that show how an OWC SSD makes everything from booting to loading apps to even web browsing faster.*
www.macsales.com/ssdtest

REVIEWS & AWARDS

MUST HAVE EDITOR'S CHOICE AWARDS TweakTown

"Class Leading In Many Real World Tests... Price Is Lower Than Most On the Market... the OWC Mercury Is At the Top of Our List." - TweakTown

Benchmark Reviews.com

"The Best Choice for Combined Speed and Operational Performance." - Olin Coles, BenchmarkReviews.com

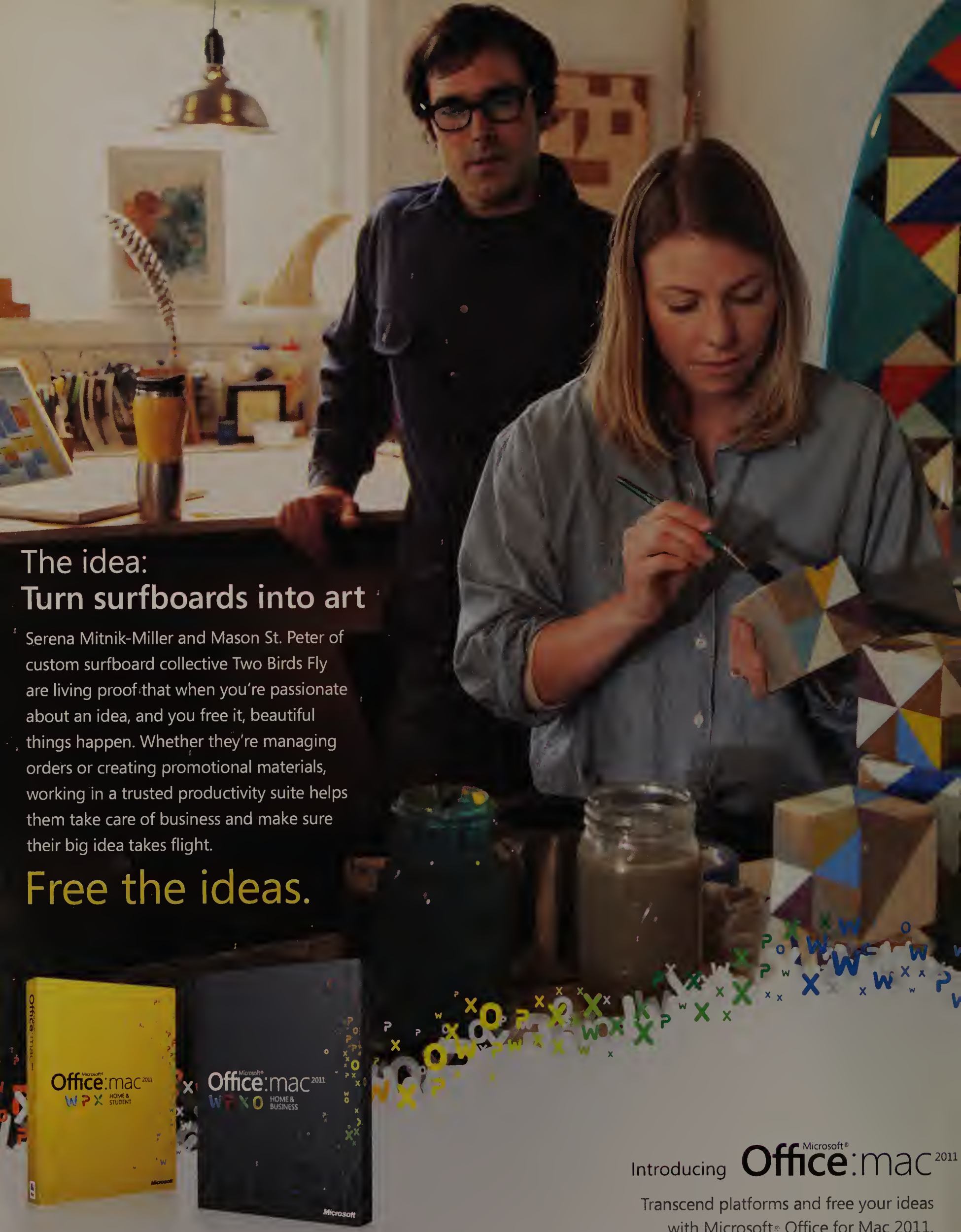
Macworld 1/2

No Risk, No Hassle 30-Day Money Back Guarantee.*

30-Day Money Back Guarantee NO HASSLE

Other World Computing
Quality Products, Expert Support since 1988
800.275.4576 | 815.338.8685

OWC is a registered trademark of New Concepts Development Corporation. The OWC logo and Other World Computing are trademarks of New Concepts Development Corporation. All rights reserved. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice. *No restocking fee when RMA requested within 21 days of purchase date and unit returned with a valid RMA within 30 days of original purchase date. Offer excludes 400GB & 480GB models. Designed and made in the US from imported parts.



The idea:
Turn surfboards into art

Serena Mitnik-Miller and Mason St. Peter of custom surfboard collective Two Birds Fly are living proof that when you're passionate about an idea, and you free it, beautiful things happen. Whether they're managing orders or creating promotional materials, working in a trusted productivity suite helps them take care of business and make sure their big idea takes flight.

Free the ideas.

Introducing Microsoft® Office:mac 2011

Transcend platforms and free your ideas with Microsoft® Office for Mac 2011.

Learn more at officeformac.com/freetheideas